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Little Books on Asiatic Art Vol. 3

Indian Architecture*

By

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75 Illustrations & 45 Diagrams.

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* Separate Volumes devoted to "Southern Indian Architecture" and "Indian Islamic Architecture" will be published later.

From the absence of any kind of architectural relics of the Vedic period, (2500-800 B. C.)* it is generally concluded that architecture during this early period of Aryan culture was in a very primitive state. At any rate, architectural attempts of the period must have been carried out in such impermanent materials as earth, or stucco, bamboo or timber. There is no doubt that before stone came into use, timber or bamboo was the only medium for architecture. And in India, as elsewhere, the "wooden period" preceded the "stone," in architectural history. The Vedic rites themselves called into existence architects for constructing "Fire-altars" ("Yajna-vedis") and "Sacrificial halls" ("Yajna-Śālās"). Originally, these altars must have been very simple platforms, perhaps made of "Kuśa" grass and mud. And the "hall" must have been a very primitive thatched hut. But the 'vedis' soon came to be devised in diverse artistic shapes and forms which quickly acquired magic or symbolical significance. Thus in the Tāittirīya Samhitā different forms of altars are prescribed *e.g.*, 'falcon,' 'chariot,' 'man with uplifted

* According to the estimate of European scholars.

One

arms'. This led to manuals being composed giving rules for measurement and diagrammatic formula for the construction of these altars such as we find in the "Sūlva Sutras" (C. 800 B.C.). From the description of a 'hall of sacrifice', we find that this sacred ritual edifice, the earliest ancestor of all later temples, was made of bamboo, perhaps, of reeds and mats, and not even of wood. The period before the use of wood has been justly called the "thatched period" of Indian Architecture, which still survives in Southern India and also in hut structures ('āt-chāla', lit., "eight sloping roofs") in Bengal.

The memory of this thatched construction is perhaps preserved in the circular arches in the architecture of old buildings and palaces pictured on early Buddhist monuments (*e.g.* Bhārhut, Sānchi). There is no doubt, however, that wooden architecture was generally practised, for we find as early as the Rigveda, references to skilled craftsmen, and a special guild called "ratha kārikās" (builders of chariots). Though wood appears to have been the common material for architecture, stone is occasionally referred to, and the Rigveda (4, 30, XX) actually alludes to "a house made of hundred stones" (Śatam aśmanmayīnām purām). As the only possible corroboration of this may perhaps be cited a stone relic of much

Fig. 1

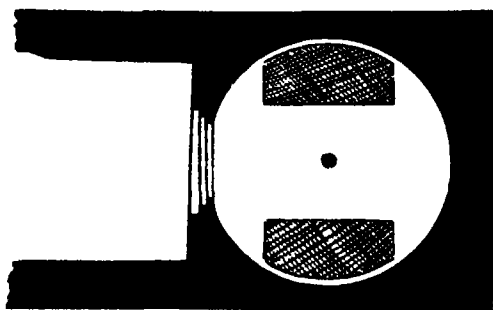



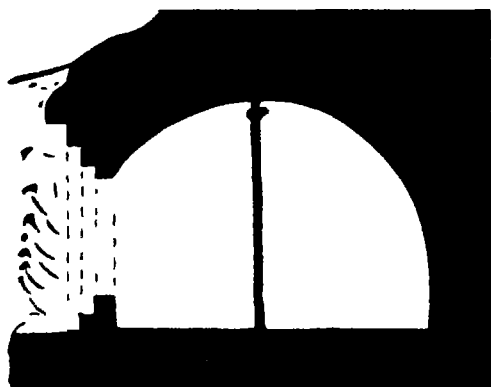
Fig. 2

Elevation of hollow stupa Mennapuram Tellicherry

Fig. [illegible]

Sudama Cave near Gaya

Fig 4

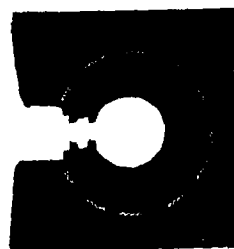
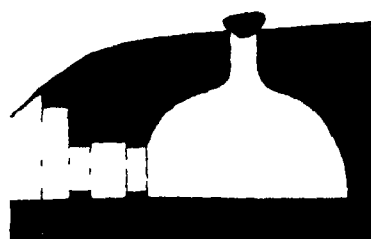



Fig 5

Hollow Cave Bangala Mena Cannanore Malabar

later period viz., an inscribed sacrificial stake ("Yūpa") discovered at Ishapur near Mathura, datable about the 144 A.D. Certain rock cut tombs have been discovered at Mennapuram, near Tellicherry, in Kerala (Malabar), which, Prof. Jouveau-Dubreuil believes, belong to the Vedic age. (Fig 1 and 2) They are, in form, "hollow stūpas," that is to say 'hemispherical in shape'. And one of them has a peculiar slender column in stone at the centre. This pillar was not a structural necessity, but evidently an imitation in stone of earlier wooden structures for which the pillar at the centre performed important structural function. It is quite possible that this cave, is a translation in stone of a very early form of hemispherical huts, which may have existed from times before the Buddhist period. For if we compare the section of this Malabar cave with that of the Sudāmā cave near Gayā (Behar) (Fig. 3), we notice that there is an attempt made to imitate the "dome" of a hemispherical thatched roof, and the first may be an ancestor of the latter. In a 'hollow cave, of hemispherical shape,' with an opening like a chimney at the centre, discovered at Bangala Motta (12 miles north of Cannanore) in Malabar, (Fig 4) M. Jouveau Dubreuil believes we have the survival of a Vedic fire-altar in a cave

form,—a veritable 'house of the sacred fire' (**Agni-drīya**). Curiously, the chimney of this vedic 'fire-place' occupies exactly the place of the 'harmikā of the 'Buddhist' stūpas and the form of the latter may perhaps be deduced from this primitive cave shrine.

In Indian Epic Literature, there are numerous references to 'abode of Gods', in the sense of a shrine, or temple of a god ("devāyatana"), but it is impossible to say with certainty to what period of history they belong, and what was their shape or form. In the Rāmāyana, 'the white washed portals of gods' temples,' and even 'the blessed abode of Viṣṇu' are alluded to. The Mahābhārata is also full of similar references, of uncertain chronological value. Of special importance are the various picturesque descriptions of 'Sabhās', or assembly-halls, or palaces. One made for the Pāṇdavas being said to have been inspired by the models of architecture near the Maināka hill, north of the Kailāsa. The famous 'lac-pavilion' ("Yatu-griha"), specially designed for a temporary purpose in flimsy materials, cannot be taken as a common or typical example, for the period pictured in the Epic. A remarkable assembly hall, or palace (Sabhā) for the Pāṇdavas is related to have been built by Maya Dānava, the reputed author of the principles of architecture, re-

corded in the **Maya śilpa śastra.**

Old Pali literature also bristles with allusions to temples, or relic-shrines ('chaitya') assembly halls (sabhā) and palaces ('prāsāda'). Of special significance are the references to Kutāgāra ('peaked huts') a primitive temple with a curvilinear roof, of which some representations may be seen on the reliefs from Bharhut (Plate IX). Some of the reliefs at Sānchi and Bharhut offer examples of old Buddhistic, or perhaps pre-Buddhistic houses and palaces which are referred to throughout in the Jātakas. Pali Literature frequently refers to the 'science of architecture' viz: Vattu-vijiā (vāstu-vidyā).

The earliest surviving architectural relics are the so-called Chaityas of the Buddhist period. They are not in any sense specially Buddhistic but were adopted by Buddhists, from earlier, perhaps, Vedic architectural models. "In their iconography as well as in architecture the Buddhists followed the Vedic traditions" (Jouveau-Dubreuil). Long before the advent of the Buddha, memorial mounds used to be erected over the relics of holy personages. According to its root meaning, Chaitya (from **chitá,** a funeral pile) denotes anything connected with a funeral pile e.g. the tumulus raised over the ashes or relics of a dead person. Hence, technically, a

'chaitya' is a 'Stūpa' (Something raised), a mound. In a generic sense 'chaitya' has been understood to mean any relic-shrine, or altar, and generally a place of worship, or a temple. In the epics, it is used as a common equivalent for a temple, an altar, or a shrine. In Buddhist art, it is a mound containing a relic e.g. ashes, bones, hair, or tooth of the Buddha. 'Chaitya' is a religious term, while 'Stūpa' is an architectural equivalent for a relic mound

The oldest stūpa in brick, hitherto discovered is the remnant at Piprawha, on the Nepal frontier, supposed to date about 450 B.C. The remnants of Piprawha stūpa show that bricks must have been used for building long before the birth of Buddhist architecture

The typical form of the earliest Buddhist building, indeed, of any Indian building, are the Topes (stūpas) at Sānchi (Plate I),* Originally built of brick by Aśoka (264-227 B.C.) about 3rd century B.C., its stone coverings and the railings and gatways are belived to have been added a century later. The characteristic shape of the Great Stūpa at Sānchi, may be conveniently studied in a diagram (Fig 6).

* The Great Stupa at Sānchi, having been frequently reproduced, we have chosen for our illustration in Plate I, the Stupa No2, which is smaller in size, and far less known, but equally typical in form

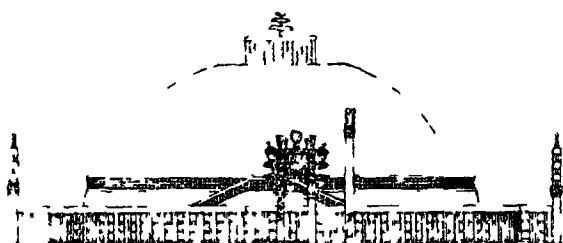



Fig. 6. Elevation of Great Stupa, Sanchi (Marshall)

Fig. 7. Restored Elevation of Tope at Manikyala (Fergusson)

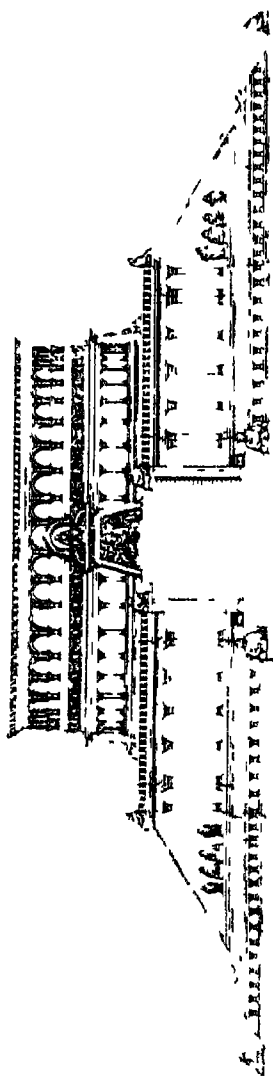



Fig. 8. Restoration of Ahin Posh Tope (Simpson)

It is an almost hemispherical dome ("aṇḍa"), truncated near the top, and rises from a lofty terrace, which formerly served the procession path for perambulation ("Pradakṣiṇa"). The dome with the platform is enclosed in a massive balustrade of stone ('prākāra'), which was originally of wood, and copied later in stone. The balustrade or railing consists of posts ('stambha') pierced with cross bars ('suchi') and mounted by copings ('uṣṇīṣa'). On the summit is a small pavilion ('harmmikā') from which rises the shaft ('daṇḍa') of the umbrella ('chattra'), the Indian emblem of sovereignty—signifying the reign of dharmma, the religious faith propagated by Aśoka, the great Buddhist Dharmma-rāja. The finial, is called the Tee ('Htı,' a Burmese word). The umbrella, originally one, gradually increased in number and gave an elongated appearance to the later stūpas in Nepal and China, and gradually lengthened out in the shape of the Indo-Aryan spire, the stūpa itself inclining to the form of a tower. The dome underwent gradual modification, as we find in the examples at Ceylon, *e.g.*, Thupārām Dagoba* of Anuradhapura, Ceylon (Fig 11) datable about 246 B.C. and Swayambhunāth Chaitya of Nepal of uncertain date

* Dagoba – dhātu-garbha, a mound with a relic (dhātu) in its womb, hence, 'a relic mound.'

(Fig. 9). The gigantic segment of the broken dome of the Mirisweti Dagoba at Anuradhapura (Plate V) is interesting on account of its shape. The earlier evolutions are best illustrated in the forms achieved in the Tope at Mānikyāla (Fig. 7) (20 miles South-East of Rawalpindi) ascribed to about 30 B.C. and the more elaborate example at Ahin Posh in the Jelalabad valley, very cleverly restored by Simpson in the accompanying drawing (Fig. 8). The important features of the last named stūpa are the storied terrace and the staircase at the four quarters, a scheme which might have been carried to Java — as illustrated in the plan of the Borobudur. In Burma, the early Indian model, went through modifications, which evolved forms in which it is difficult to recognize the original prototype. In the Mangalazedi Pagoda, Pagan, Plate VII, dated 1274 A.D. the platform is elevated to storyed terraces, and the dome, shrinks into a cone, almost merging into the finial which terminates in a spire, the umbrella having disappeared already. But the intermediate stage is well illustrated in the carved representations of the stūpa met with on the marble slabs at Amarāvati (Figs. 12 & 13). One of two which are reproduced here, (Fig. 12) is of sumptuous effect with its cap of cluster of numerous **chattras.**

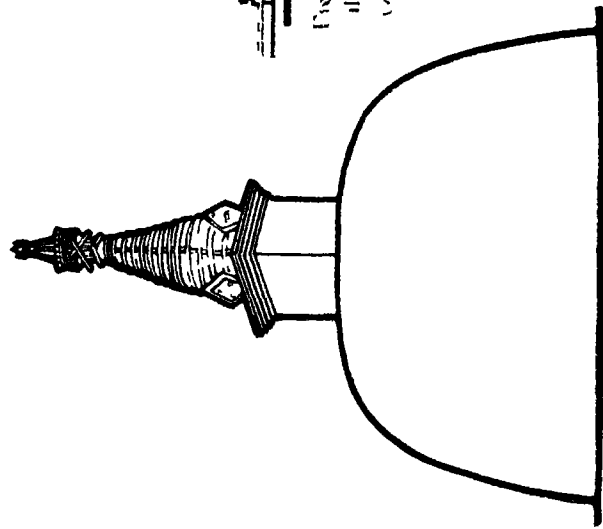



Fig 9 Chaitya of Swayambhunath Nepal

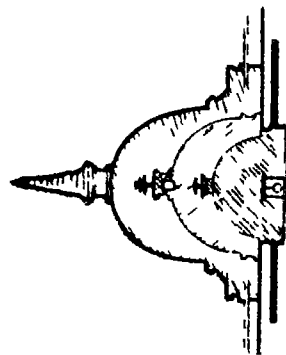



Fig 10 Diagram of Stupas illustrating development (Archaeological Survey)

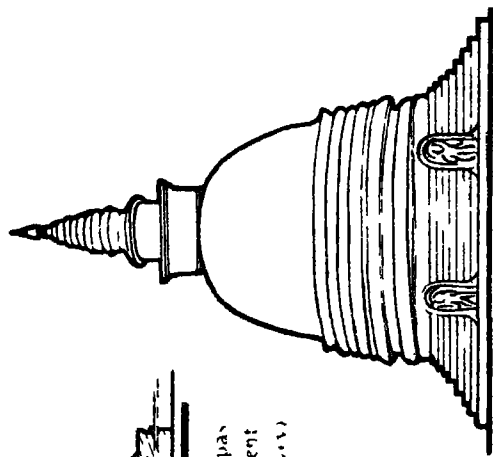



Fig 11 Thuparam Dagoba Anuradhapura

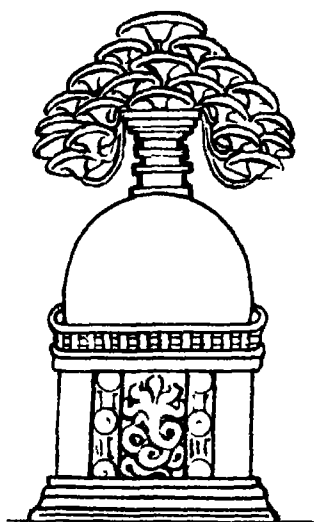



Fig 12

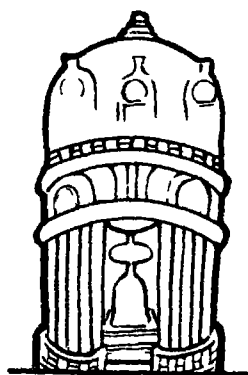



Fig 13

Dagobas from Amaravati Sculptures

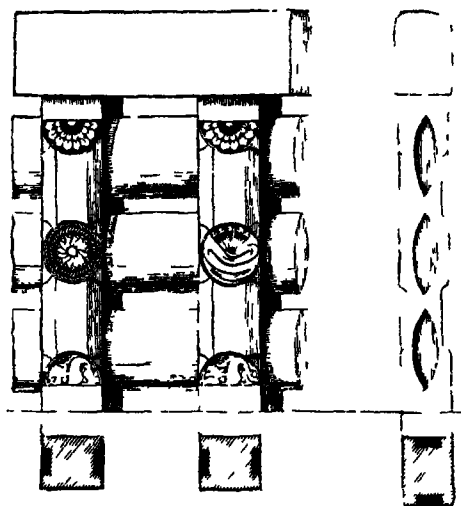



Fig 14 Diagram of Railing from Sanchi Museum

The railings of the Sanchi Topes became very characteristic features of Buddhist architecture (Fig. 14) very well illustrated in the later examples at Bodh Gaya, and the elaborately carved marble railings at Amarāvatī (1st century B.C. to 2nd century A.D.) and in a somewhat modified form at Anuradhapura in Ceylon (Plate XI). The magnificent carved gateways or 'toraṇas' best illustrated at Sanchi (Plate II) were introduced into China and Japan along with Buddhist art from India, and are there known as "torii."

The next typical form of Buddhist architecture is a Chaitya-hall later evolved into a Vihāra, a place of assembly, or College dormitory for the monks of which a very early form is pictured on a stone relief at Bharhut (Fig. 15) which has a characteristic sloping roof mounted by a row of knobs evidently ancestors of 'kalasas' of later times (cp. Pallava temples at Seven Pagodas) a feature repeated in a very interesting two-storied temple inscribed on a slab at Amarāvatī (Fig 16). From very early times, the Vihāra has been distinguished from the Chaitya, the latter being regarded as the temple of worship, while the former, as the residence, or the assembly halls for Buddhist monks. Both forms occur side by side at Bhaja, Bedsa, Karle and also

A typical Buddhist Chaitya-hall is, like the stūpa, derived from earlier architectural models. The structural Chaitya-halls were most probably made of wood, and have not survived except in pictured replicas on carved reliefs, as at Bharhut and Amarāvatī. A novel form of a Buddhist temple, inscribed on a slab from Amarāvatī, is illustrated in the drawing here reproduced (Fig. 16). It is in the form of a hall with a **chaitya** window, and a barrelled roof mounted by a row of **kalasas** (jars) which re-appear, at a later date, on somewhat similar rock-cut forms in the monuments of the Pallavas (cp. Ganeṣa's Ratha, Plate LVI). The typical facades of pre-Buddhistic 'chaitvas' can be well gathered from the excavated Lomaśa Riṣi cave on the Barābar hill in Behar (3rd century B.C.), evidently a translation of wooden originals (Plate XII). This has obviously served as the model for the Bhaja Chaitya-hall, (2nd century B.C.), (Plate XIII). These Chaitya-halls, (of which the progressive developments can be studied in the examples at Bedsa, Nasik, Karli and Ajanta), consist of a nave and side aisles terminating in an apse or semi-dome. The pillars separating the nave from aisles are continued round the apse. Under the apse, and in front of the pillars is the rock-cut stūpa, much in the same position as an altar in a

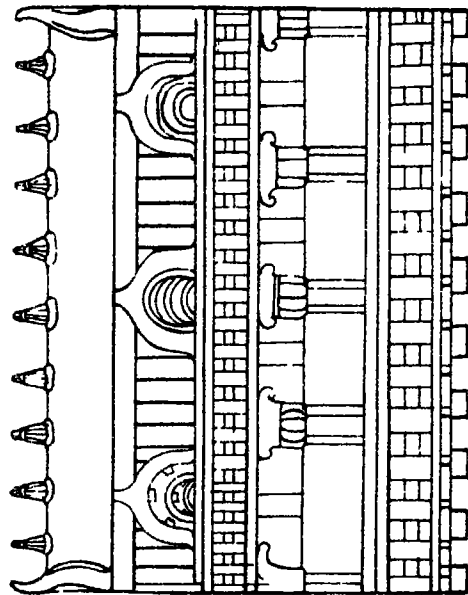



Fig 15 Chaitya Hall from Bharhut Relief

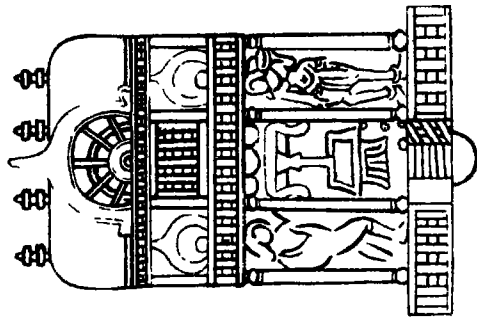



Fig 16 Two-storied Temple, Amaravati Relief

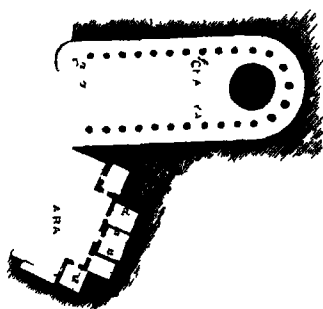



Fig 17 Section of Chaitya & Vihara Cave
Bhaja (Fergusson)

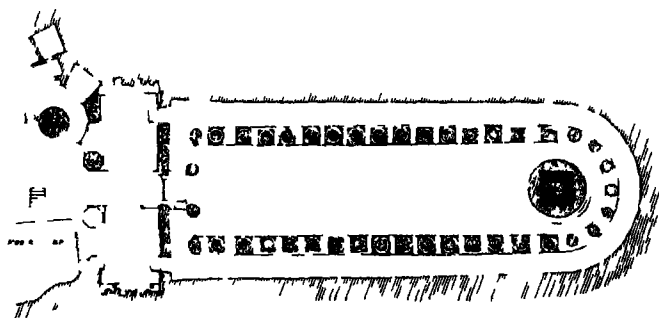
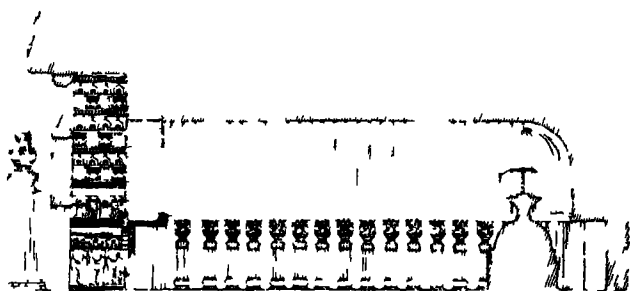



Fig 18 Section & Plan of Chaitya Cave
Karle (Fergusson)

Christian church. The roof of the Chaitya is a semi-circular covering as illustrated in Fig 18. The door is opposite the stūpa, over which is a large window shaped like a "horse-shoe" which Mr. Havell very logically derives from the leaves of the Aśvattha (peepul tree).* In the Chaitya-hall at Bedsa (Vidiśā) & also in the verandah at Nasik (Plate XVII) and later at Karli, we come across very interesting developments of the 'stambha,' the characteristic Indian pillar. A typical Indian pillar, derived from earlier wooden models, is a shaft, stuck into a jar ('kalasa') surmounted by a capital or abacus of upturned lotus, (wrongly identified by archæologists with the 'shape of a bell') over which on a little cornice (harmmicā) are effigies of bulls and horses sometimes mounted by human couples ('mithunas'). The 'stambhas' of cave architecture easily recall the famous Aśoka pillars carrying effigies of various animals as royal emblems. In the earliest Chaitya-halls at Bhaja and Bedsa, the pillars are without any capitals (Plate XIV). They appear with capitals, for the first time, on the verandah of the Nasik cave (1st Century B.C.) In the later caves at Ajanta, and also at Badami, Indian pillars evolve very elaborately ornate shapes, of many faces, and at Ajanta (Fig. 17 & 18).

* E.B Havell · 'Indian Architecture' 1913, page 81.

crowned with fluted cushions. Sometimes the capital is represented by a compressed jar out of which conventionalised foliages peep out, in richly conceived decorative motifs. This 'jar and foliage' motif is exemplified in many stages of development in many of the mediæval temples of Rajputana (Plate LXXV). A full—fledged Chaitya-hall is best studied at Cave XIX at Ajanta, 6th century (Fig 19 & 20). No structural Vihāra (Chaitya-hall) of an earleir period appears to have survived, but we can very well guess what it looked like from some of the Pallava temples at Seven Pagodas, near Madras (Plates LIV to LVII). Although the Buddhist Vihāras, and Chaitya-halls, cover a fairly long period, the temple, in the strictly Bramhinical sense of an 'image-house' (**devatá-griha**), does not evolve until quite a late period. In the Chaitya-hall at Cave XIX at Ajanta (sixth century) we have an elaborate image of the Buddha carved on the pedestal of the stūpa (Plate XIX) where we notice the temple indicated in embryo At Kholvi, near Ujjain, as, at one of the caves at Ellora (Berar) the stūpa is carved out into a cell, (cp a representation of a temple on a dagoba in relief at Amarāvati (Fig. 13), in which is placed the image of the Buddha and finally the semi-circular back of the stūpa is replaced by a square cell, the '**garva griha**' of the typical

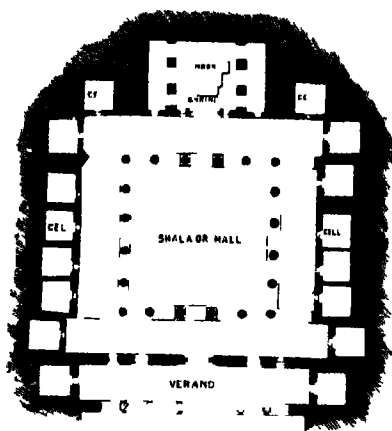



Fig 19 Plan of Cave No 16 Vihara Ajanta (Burgess)

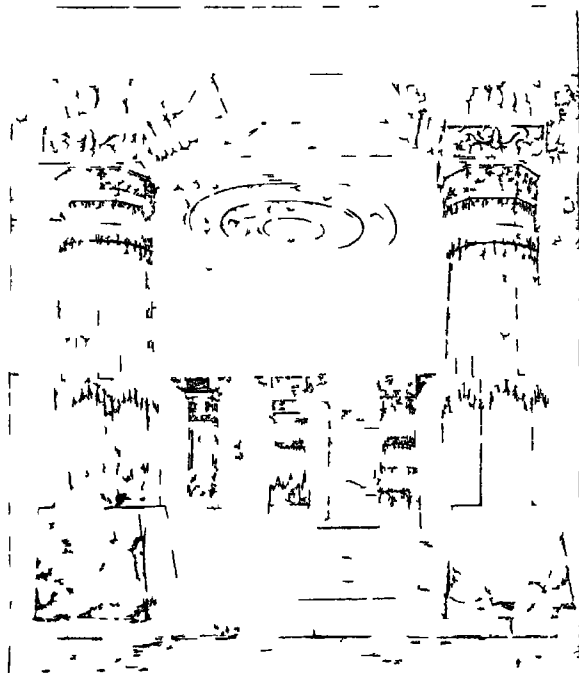
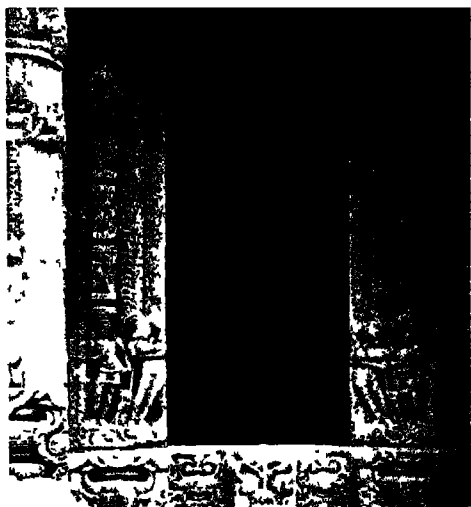
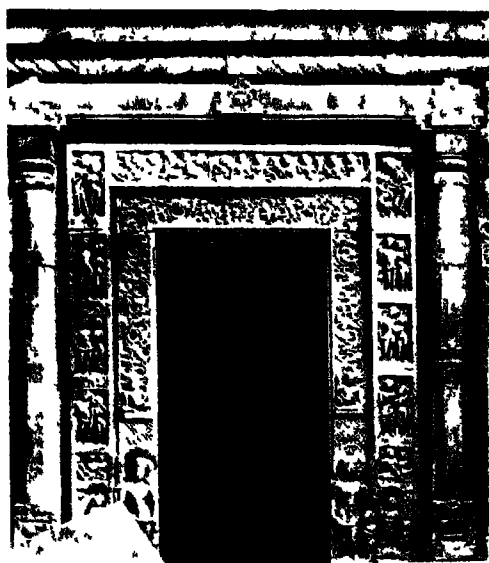



Fig 20 View of Interior Vihara No 16 Ajanta (Fergusson)

Hindu Bramhinical temple. The memory of the apsidal back of the Buddhist Chaityas is preserved in an old structural temple, dedicated to Durgā, at Aihole <6th century> <Plate XXIII>. In the meantime Indian temple-architecture has evolved some new forms and features which relate to the history of Bramhinical worship. Though the Bramhinical form of worship has now been proved to be in existence about the beginning of the Christian era, no temples dedicated to the worship of Śiva or Viṣṇu, appear to have survived before 400 A.D. Remains of some Bramhinical temples dating about 350-250 B.C. dedicated to Saṃkarsaṇa and Vāsudeva have been discovered at Nagarī <ancient city of Madhyamikā>, near Chitor. The shrines, though enclosed by a stone wall, appears to have been wooden structures. Certains types of buildings, perhaps temples, in the form of **mandapa** or dome pavilions with long pillars are represented on the Udumbara coins from Pathan Kot and Kangra dating about the 1st century B.C. On a coin of Huvishka <about 1st century A.D.> a shrine in the form of a domed pavilion with a double ornamental plinth appears to represent the images of Skanda, Vishākha and Mahāsena. But the most tangible example of the earliest form of the Hindu Temple is the flat rectangular shrine <Plate XXIV> at

Sanchi, dating about the 400 A.D. It is very primitive in shape, a translation in structural form of the rock-cut cave-temples of the Buddhist period. The porch in front is faced with four thick pillars elaborately carved with animal capitals. Here we have for the first time the nucleus of a Hindu temple viz., a cubicle cell ('**garva griha**') with one entrance and the porch (**mandapa**). In similar flat-roofed temples of the Gupta period,—Śaiva images and images of Viṣṇu appear to have been worshipped at Tigowa, (Central Provinces) (Plate XXIVa). Other examples of flat-roofed temples of the same period occur at Bhumāra in the Nagodh State, and at Nachna Kotari, in Ajaigarh, Bundlekhand, and an interesting example in the Dekkhan, known as the Lad khan's temple at Aihole, in the Bijapur District, dating about 450 A.D. The flat-roofed Gupta temples are marked by a special feature—in the forms of their carved entrances (**dvára**) to the **garva griha**,—some of them are exquisitely ornamented with bands (**śákhá**) of relief figures and scroll ornaments of which two examples may be studied, in progressive developments, one from an early Gupta temple at Nachna (Figure 21), and the other form a late Gupta temple (Fig. 22). A special motif of the decoration is the row of **mithunas** or sexual couples, which according to a

text of the śilpaśāstras 'should form the ornamentation of the last band' (**"mithunair śákhá-śeṣam vibhūṣayet"**)*

It is at Aihole, (Bijapur District), the mysterious breeding ground of early Hindu temples, that we, for the first time, perhaps, come across a temple, with a tower, which had also, a Śikhara. This is the Hucchimalligudi temple dating about the 6th century. But in the meantime, a structural temple of a novel shape had reared its head. It is the Kapotesvara temple at Chezarla (Plate XXI), in the Kistna district. Its peculiar feature is the barrel roof ('Kubja priṣth'), also round at the rear end, terminating at the entrance in a gable-end chaitya-window structure, having its earliest prototype in Southern India, in Sahadeva's Ratha at the Seven Pagodas. This form is practically repeated in an elaborate version in a much later shrine (datable between the 8th and the 11th century) being the Vādāmallisvara Temple at Oragadam, Chingleput District (Plate XXII). These structural Chaitya temples are evidently derived from the earliest ancestor of which remains have survived of a temple at Sanchi (Fig. 23).

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* The subject is very elaborately dealt with in an article published in Rupam, No. 22-23, 1925, entitled 'The Mithunas in Indian Art.' By O. C. Gangoly.

By the sixth century three distinctive types of structural temples have been evolved, which have called for three distinct names in the **Śilpa Śāstras**, viz., Nāgara,* Drāvida, and Veśara. Each of the first two carries the **śikhara** — the tower over the '**garva-griha**' — the cell containing the image, while the 'Veśara' has a barrel roof The 'Veśara' is evidently derived from the rock-cut cave temples of the Buddhist period. An early structural 'Veśara' temple evidently dating from the Buddhist period (but now appropriated to Vaiṣṇava worship) has been discovered at Ter, in Naldurg district of Hyderabad The oblong **mandapa** in front may have been a later addition (Figs. 24 & 25). It does not appear to have long been in fashion. There are two examples at Mahāl-valipuram (Seven Pagodas) (Plates LV & LVI). The Vaitala Deul at Bhuvaneśwara (Plate XXXVI) appears to be a modified example of the same class. But it appears afterwards to have been dropped out of practice. The Nāgara type is distinguished by its curvilinear śikhara, ending with a 'kalasa' (aus-pious jar) with some pointed emblems as finial or

* This type corresponds to the old classification of 'Indo-Aryan' of Fergusson The term 'śikhara temple' for this type is not a happy definition, for the Southern Dravidian temples have also śikharas (towers), though the form of Dravidian śikharas is quite different

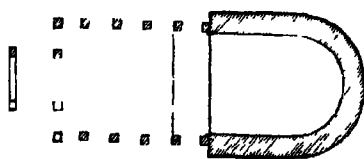



Fig. 23 Plan of Chaitya-Hall Sanchi (Fergusson)

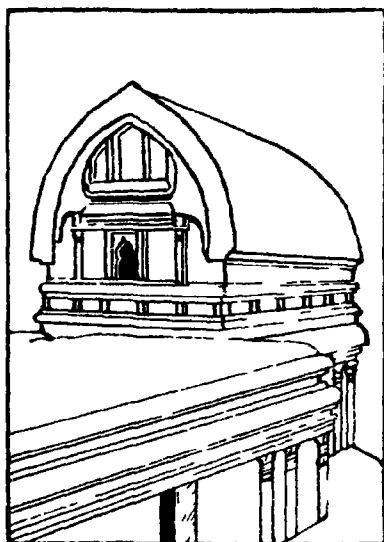



Fig. 24 Ancient Buddhist Chaitya at Ter Hyderabad (Cousens)

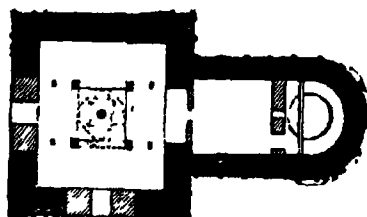



Fig. 25 Plan of Ancient Buddhist Chaitya at Ter (Cousens)

Fig. 26 Dravida Shrine of a temple

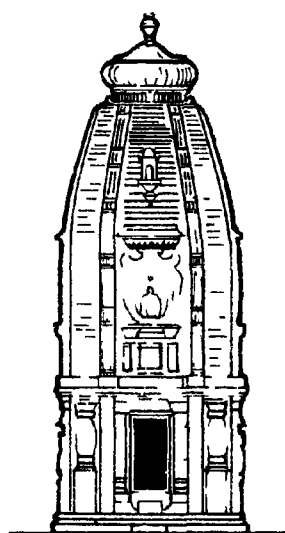
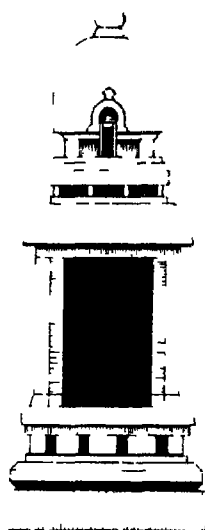



Fig. 27 Nagara Shikhara Temple

spire (*śringa*). This type better known as the Northern or the 'Indo-Aryan' type, has reigned almost supreme in the greater part of Northern India. How it was evolved is still a matter of controversy. But it appears in a somewhat undeveloped form at Pattadakal side by side with a Dravidian temple, about the 7th century. The characteristic of the Northern śikhara (Nāgara) temple is its curvilinear tower (sukanāsā śikhara), and its peculiar finial of—ribbed 'amalaka' *(emblic myrobalan)* which caps the tower and carries the 'kalasa.' The Drāvida type has for its finial a conical cap — technically called a "stūpikā," (a miniature mound) (vide Figures 26 & 27). According to Mr. Havell, the Indo-Aryan śikhara temple was the type of Viṣṇu temples, and the Drāvida form, the type of Śiva temples. The latter has prevailed in the South, the stronghold of Śaivaism, while the spired Nāgara temple has flourished in the north, the chief theatre of Vaiṣṇavism. Mr. Havell believes that the two forms had existed side by side at Ninevah, and he cites the famous Narām-sin stele in the British Museum in support of his contention. (Fig. 28)

The Indian temple, in its essential form, whether in the North or in the South, consists of the **garva griha** (cell) which contains the image of the presi-

ding deity and which is a cubicle cell **mounted** by a tower (**sikhara**) **with the proch** (**mandapa**) in front, very typically represented in the diagram of the Temple of Viśveśwara at Benares (Fig. 29). Sometimes the perambulating path (**pradakṣiṇa patha**) round the temple is covered by a narrow passage of sloping roof called an **ardha mandapa** (as in some of the old temples at Pattadakal and Aihole vide Plate XXXIII) The Indian temple in its essential, though primitive, form is best studied in the early Gupta temple at Sanchi (Plate XXIV) a cell with a porch in front, the **garva griha** with the **mandapa**, the typical temple in its simplest form. In some of the Southern temples a small intervening room is added between the cell and the porch called the **anatarála.** The memory of the flat-roofed Gupta temples is perhaps preserved in the form of a minor shrine of Nandi (nandi-mandapam) in the court yard of the Virūpāksa temple at Pattadakal (740. A D) where the flat-roof has a small **chūdá** or pinnacale at the centre (Plate XXV)

The most typical and elaborate examples of the Nāgara temple occur in the famous group of shrines at Bhuvaneswara, Konarak and Puri in Orissa There are as many as 35 important temples, with numerous replicas in miniature, covering a period between the

Fig 28 Naram Sin Stele Nineveh British Museum

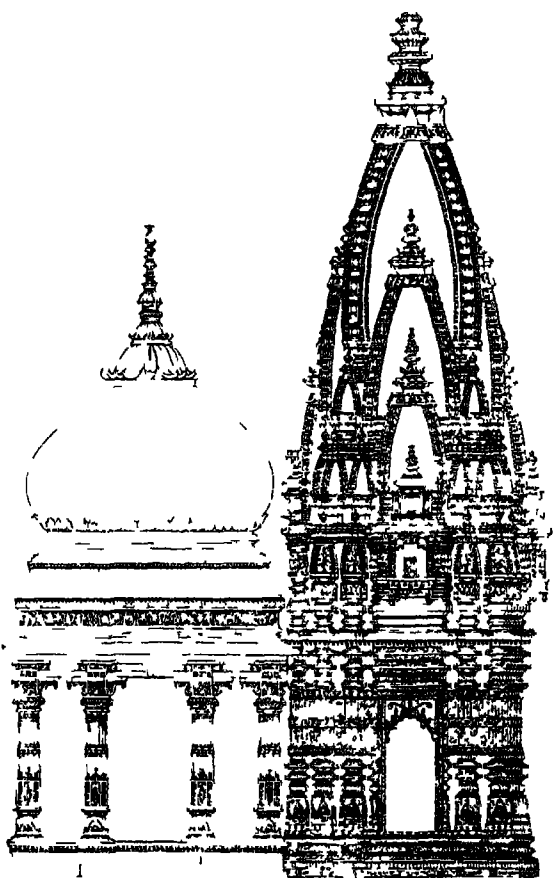



Fig 20 Temple of Visweswar Benares (Prinsep)

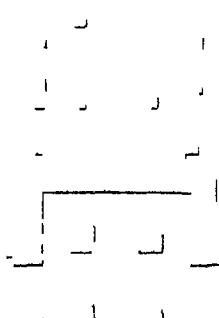
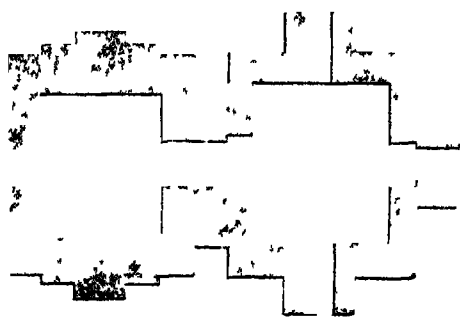
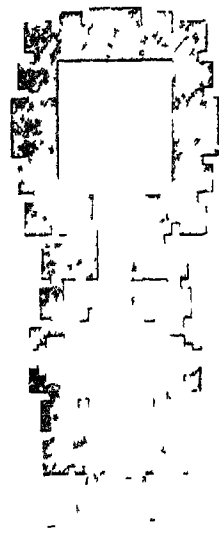
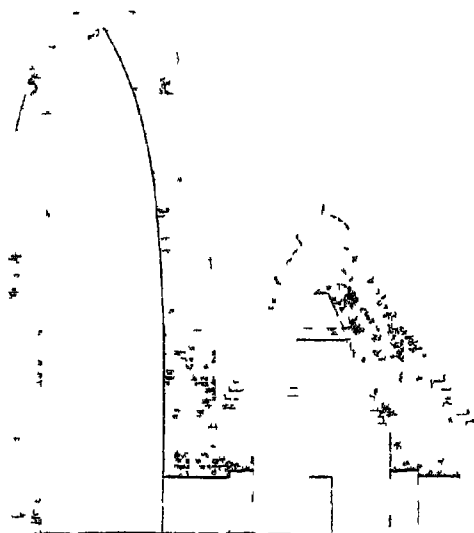



Fig. 30. Plan & section of the Temple at Konarak (After Fergusson)

Fig. 31. Plan of Lingaraja Temple, Bhuvaneswar (After Mitra)

eighth and the thirteenth century, the most important group being at Bhuvaneśwara. The earliest* in date is, perhaps, the Paraśurāmeswara temple, dating about 750 A.D., and the latest in date, the Sun temple at Konarak, dated about the 13th century (vide Diagram of Plan and Section in Fig. 30). Between them comes the Great Lingarāja temple at Bhuvaneśwara, datable about 1000 A.D. The last named temple, perhaps represents the local Orissan type in its characteristic feature with its aggressive development of the 'amalaka śilā' and the almost parallel lines of the tower. In the earlier forms in Orissa, (e g. Paraśurāmeswar) the tower (Vimāna) is somewhat dwarf and conical. The 'mandapa' or porch in front of the tower is called in Orissa a 'jagamohana' ('Tempter of the World'). In some of the Orissan temples, the 'jagamohana' is preceded by a 'nrityamandapa' (dance hall) 'sabhā-mandapa' (assembly hall) or 'bhoga mandapa' (dinner hall) adding a succession of anciliary halls in front of the main shrine as illustrated in the plan of the Lingarāja temple at Bhuvaneswara (Fig. 31). A typical 'jagamohana' is best illustrated in the surviving example in the temple of the "Black

* It is now believed, mainly on the basis of style, that Śatrughneswara is the earliest surviving temple in Orissa.

Pagoda" (Plate XXXVIII). The Nāgara type has been profusely used in building temples in Rajputana. An early phase of the type in Raiputana is best illustrated in the Sun Temple at Osia near Jodhpur, of late ninth century (Plate XXXVIIIa). It has the cap of **amalaka** and an open **mandapa** in front, supported on a row of pillars, which distinguish it from the Orissan types. The next important group of Nāgara temples occurs in some very well developed forms at Khajuraho in the Chattrapatra state, the old Chandela capital of Bundelkhand. They were erected between 950-1050 A.D. and are almost contemporary with the Orissan group. The finest of the Khajuraho group—is the Kandarya Mahādeva temple, 116 feet in height. The magnificent effect of most of these temples of the Khajuraho group is due to a clever emphasizing of the vertical lines by the repetitions of the replicas of the 'tower-forms' round the principal tower (vimāna). The effect is of a clustered arrangement of vimānas. An innovation is provided by shaded balcony windows. The elaborate floral and figure sculptures add great distinction to the facades. In Gwalior, and in various other places of Rajputana, and Western India, Nāgara temples with local variations are plentiful. In the Punjab Himalayas, similar types but in simpler forms, occur at Masrur, Kangra

and Bajinath. The later developments of the type are best studied in the numerous examples at Benares, the most typical is the Visvesvara temple, rebuilt, on an earlier foundation, in the early part of the 18th century (Plate XLVIII). That the form has not lost its possibilities is proved by numerous uses and adaptations of the form, in the group of Jaina temples at Śatrunjaya and Palitana (Guzarat). A very instructive illustration of the history of the form is furnished by the "ultimate form" the Orissan type took in the Temple of Scindia's mother at Gwalior (19th century) (Fig. 32). The curvilinear form has strengthened into a simple conical pyramid, with the towers reduplicated in miniature forms, a variation is introduced by the use of a Rajput dome. The application of the Nāgara type in the Jaina temple cities, is variegated by the use of domes, of which the pleasant semi-circular silhouettes offer very pleasing contrasts.

A very interesting controversy* has raged amongst scholars as to the origin of the peculiar form of the curvilinear śikhara of the Nāgara type of Northern India. According to Simpson, the form is

* The matter is very fully discussed by Mr. G. D Sarkar in his learned paper "Notes on the History of the Śikhara Temples" (Rupam, No 10, April 1922)

derived from the dome or conical hut of archaic type still used by the Todas of Southern India—or, in the alternative, copied from old bamboo procession-al car (vide Fig. 33). A third view propounded by Professor A. A. Macdonell of Oxford is that the śikhara is derived from the stūpa or the chaitya. A fourth solution to the riddle has been recently sugges-ted by Rai Bahadur Rama Prosad Chanda. Accord-ing to him the curvilinear śikhara is the descendant of the archaic 'kutāgāra' frequently represented on the bas-reliefs from Bharhut (Plate IX). The sikhara temple in its archaic form is perhaps represented in the Mahābodhi Temple at Gayā—with a central conical tower, flanked by four minor towers at the corners of which a replica has been sought to be identified in a very old terra cotta plaque, dug up at an old site at Kurkihara (Behar), evidently a Buddhist votive tablet (Plate XXVI). Before the full fledged 'nāgara' śikhara temple evolves in the group at Orissa, it must have had an earlier history, and its archaic form may be traced in some of the old temples at Pattadakal one of which (Plate XXXI) is a close parallel to the Paraśurāmesvara at Bhuvaneśvara (Plate XXXII). An early nāgara and an early Drāvida form occur side by side in a group at Patta-dakal (Plate XXIX). A new type of temples in

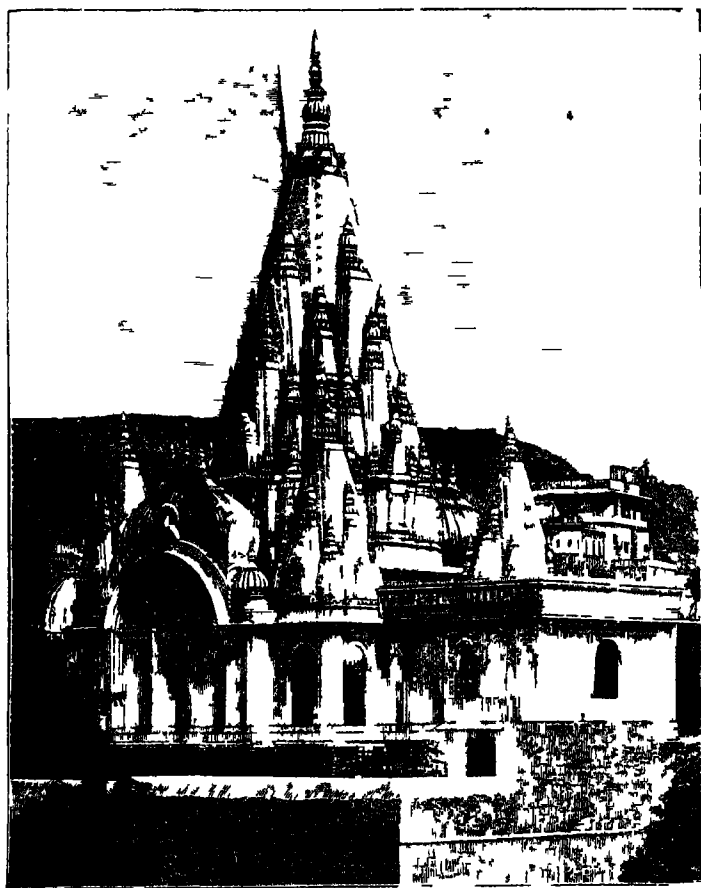



Fig 32 Temple of Scindia's mother at Gwalior (Fergusson)

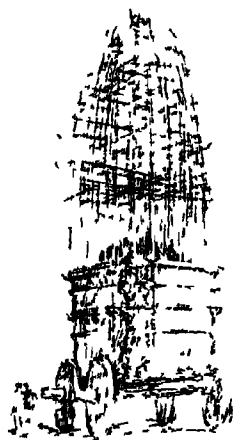



Fig 33 Bamboo Procession Car Simpson

Rajputana, developed important features typically represented by the famous Jaina temples at Mount Abu of which the most important are those of Vimala Shāh (c. 1032 A.D.) and of Tejapāla (1232 A.D.), (Plates XLV, XLVI). Their outstanding pecularities are large circular mandapas (porches) supported by richly carved columns joined by strut brackets, covered by still more richly carved ceilings with central pendants

It is the peculiar development of the columns which lend to these Jaina temples of Rajputana a peculiar character. Another peculiar feature of this type of Jaina temples is a collonaded group of minor shrines spread over the four sides of the courtyard at the centre of which stands the main shrine (vide Plan of Temple of Vāstupāla, Fig 34). Probably the famous temple of Somnāth, destroyed by Mahmud about 1000 A.D was in the same style (Fig 35) A novel feature of these temples is the Rajput dome which must be distinguished from the Moghul domes An interesting development is the Chaumukha or the four-faced form of temples chiefly used for the four-faced Jaina images — each image being seen from each of the cardinal points (Plate XLIV) Bengal, with its old traditions of wood and bamboo architecture offers some new forms in their 'Chandi-

mandapas' (lit., porch of goddess Chandi) and temples with curvilinear roofs, evidently derived from bamboo forms. A very characteristic form, used generally for temples of Śiva (Śivālaya) (Fig. 36) has a sloped cover, truncated at the top, which is mounted by another miniature tower, evidently borrowed form 'leaf-huts' very common in Bengal. Another typical form is illustrated in the temple at Kāntanagar (17 miles from Dinajpur Station) (Dated 1704-1722) designed in the form of wooden 'raths' arranged in tiers of bent cornice, mounted at corners with miniature curvilinear towers (Plate L). The type is repeated in the well-known temple at Dakṣiṇeśwara, the shrine of Rāmakrishna near Calcutta. Very interesting variations of the type of 'leaf huts' temples of Bengal are furnished by the Char-Bangla Temple at Barnagar, near Murshidabad (Plate LI) and the temple at Kusumakholā in the same district The temple of Rāni Bhavānī (Plate LII, dated 1675 śaka) is an elaborate development of the type illustrated in Fig. 36. In old Gauda, a tri-foiled arch has been a peculiar feature with affinities with Orissan parallels. The characteristic tri-foiled arch supported by characteristic pillars frequently occurs as architectural backgrounds in stone sculptures of the Pala period (9th-12th century). The

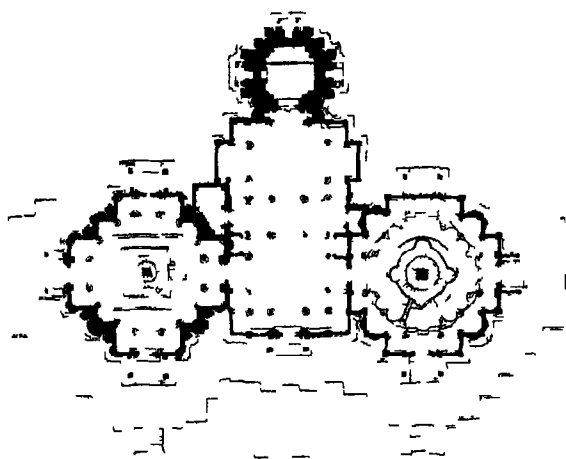
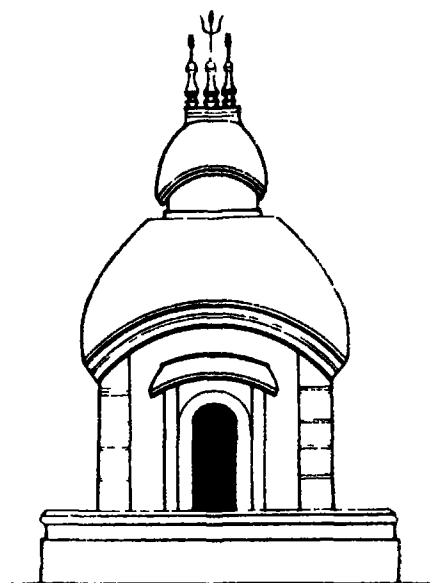



Fig 36 Type of Leaf Hut Shiva Temple Bengal

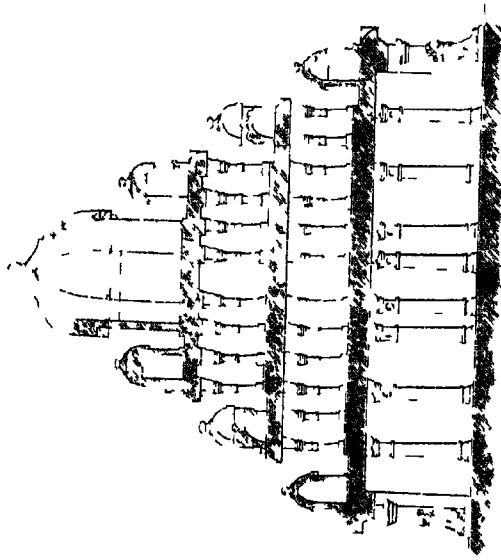
shrines of the Himālayas, chiefly of wood, offer interesting developments. But the most peculiar forms appear in the temples of Nepal. Variations of the Nāgara type and of the Bengal types occur side by side with local models. Of this the most characteristic are the storied wooden temples with sloping roofs, very near in design to the Chinese pagodas (Plate LIII). The sloping roofs are supported at each stage by carved brackets, the four ends being furnished with "up-turned noses" which are a peculiar feature of the Far Eastern temple architecture. These Nepalese types have affinities in Cochin and Travancore and, also, in cognate thatched temples at Bali. The 'kosthakar' type is an obvious development of Nepalese Chaityas. The Rādhākrisna temple at Khātmundu (Plate XLIX) is a variation of the 'ratha' temples of Bengal, the tower (Śikhara) being an adaptation of the Orissan 'Nāgara' type. In the Panjab Himalayas, specially at Kangra, numerous 'Śikhara' temples of the 'nāgara' type in its simplest form have survived.

In Southern India, (dakshiṇāpatha), the theatre of Tamil civilization, there has reigned a peculiar school of architecture, specially associated with the Tamil races and their culture, hence designated as Dravidian,

the term being derived from the word Tamil (Damil) The history of this school can be very clearly traced by the succession of definitely dateable monuments spread over all parts of the peninsula south of the Godāvarī, beginning from about the sixth century up to the present day, for the old devout, royal builders have in the Nattacotta Chetties of to-day, (a guild of enterprising merchants), worthy successors, and temple building is still a pious act of merit.

As in the North, structural temples are preceded by rock-cut shrines and caves, of which the earliest forms are furnished by a primitive type of rock-hewn caves with simple stonebeds, some of which carry Brāmhī inscriptions and are supposed to have been excavated for Jaina monks and are popularly known as 'the beds of the Pāndavas.' Next, in order of time, comes the series of early Śaiva caves, known as the Orrukal mandapas or 'one-stone shrines,' attributed to the princes of the Pallava dynasty—derived from a race of great martial energy They carved a kingdom in the Vengl country, from the declining Andhras, and were in constant conflict with the Chalukyas of Bādāmi, and with the Cholas and Pāndyas of the Coromondal coast. The Pallavas appear to have been the first builders in stone in Southern India, for earlier forms of architecture

Fig 57. Section of Dharmaraja Ratha (Fergusson)

Fig 58. Diagram of a Buddhist Vihara (Fergusson)

must have been in wood, or mud, a fact definitely suggested in a Pallava inscription in a cave at Man-dagappatter which states that "this temple is caused to be constructed by Vichitrachitta (Mahendra Varman) to enshrine the images of Bramhā, Śiva and Viṣṇu, without the use of bricks, timber, metal or mortars." It is possible that the Pallavas trans-planted this style of cave architecture, to the south from the Andhra country, and possibly had for their models rock-cut shrines like those at Undavalli near Bezwada. This seems to bring southern style in contact with the earlier Buddhist forms of the North which the Āndhras must have practised in the Vengi country. This contact with northern forms is very well illustrated in the Dharmarāja's Ratha which is a reproduction in stone of a three-storied Bhuddhist Vihāra as will appear from the comparative diagrams (Figs. 37 & 38). Similarly the Nakula's and Sahadeva's Rathas, with their peculiar apsidal backs, appear to reproduce in structural form, the apsidal Chaitya of the North (compare the plan and section of the Chaitya cave at Kārli). As Fergusson has remarked, "these 'rathas' represent the petrefications of later forms of Buddhist architecture and of the first forms of the Dravidians." Incidentally this ratha, as also the Bhima's Ratha, and Ganeśa Ratha,

with their peculiar barrel shaped tops, like the back of elephants' "(Hastipristha or Kubja pristha)" are temples of the Veśara type, of which two interesting examples can be studied in the Kapotesvara temple at Chezārla (Ca 4th Century A.D.) (Plate XXI) and Vadamallisvara Temple, Oragadam (Ca 9th Century) (Plate XXII). The early rock-cut cave shrines of the Pallavas, in various stages of deve-lopment are spread over in numerous examples in the North Arcot and Trichinopoly Districts, e.g. Kila-mavilangai, Pallavaram (Figs. 39, 40) Dalavānūr. Mahéndravādi Magalarajapuram, Bhairava konda, Shiyamangalam, Trichinopoly rock-cut shrine, Trimūrti cave at Mahavalipuram. Most of these were excavated by King Mahendra varman I (about 600-625), though one or two may, perhaps be attributed to his father Sinha Vishnu (late sixth century). These Pallava cave shrines, 'in the style of Mahendra,' consisted of a cubicle cell containing the linga, faced by a porch or verandah, supported by thick square pillars, prismatic at the centre. The porch, later on, the cell itself, is flanked by dwārapālakas in reliefs. Another feature is the simple entablature (**prastara**) broken by 'Chaitya windows' called **Kudus,** with human heads. The style of the pillars, dwārapālakas and the **Kudus,** go

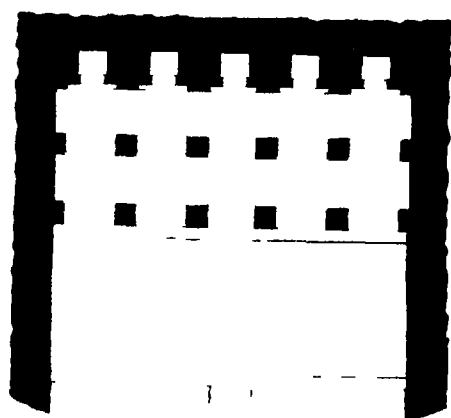



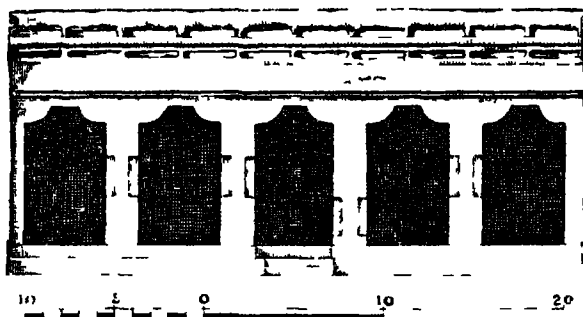
Fig 39 Plan

Elevation

Fig 40 Plan and Elevation of Pallava Temple Pallavaram Chingleput (Longhurst)

through interesting developments, (Fig. 39, 40) which offer valuable clue for a chronological stratification, very skilfully utilised by Professor Jouveau-Dubreuil. The second stage in the development is illustrated in the style of Narasinha varman I (Vātāpi Konda) (reigning about 625-650), the founder of the Mahāvalipuram, the sea-side city of Māmallapuram. In his monuments the heavy pillars are replaced by elegant pillars with bulbous capitals, supported by squatting lions—the heraldic symbols of the Pāllavas. It is under Rajasinha of Kānchipuram (700-710) that a rock-cut ratha is first replaced by a structural temple, built of dressed stones of which an early example is the Shore temple at Mahāvalipuram (Plate LVIII). The noticeable feature is the pinnacle (chudāmaṇi) over the stūpikā. The full fledged Pallava temple is represented by the famous Kailāsanatha temple (700 A.D.), also called Raja Simhesvara temple, at Conjeveram, (Plate LX) with its central tower and porch, later surrounded by a richly sculptured rows of minor shrines spread round the whole quadrangle. It is said that the Chalukya king Vikramāditya II, (733-747) after he took Conjeveram, the capital of the Pallavas, was inspired by the model of the Rāja Simhesvara temple, to build the famous Virūpākhsa temple at Pattadakal (Plate LXI) for his

queen Lokamahādevi. Of the temples of the later Pallavas, the shrine of Mukteśavara, is a very simple structure, in the "style of Rāja-Sinha" and belongs to the time of Nandivarman. The 'style of Rajasinha' is already heavy and ornate and lacking in the sobriety and the restraint of the temples at Mahāvalipuram. The contact with the Chalukyas has helped to a migration of the Pallava style towards the west. But the remarkable example of the Dravidian style travelling further up is furnished by the famous rock-cut shrine of Kailāsa at Elura (Plan & section, Fig 41, 42). It is a monolithic structure built by the Rāṣṭrakūta King Krishna I about 760 A.D. It is more related to the temples of the Chalukyas rather than of the Pallavas, but the tower is typically "Dravidian" (Plate LXII)

In the meantime the decline of the Pallava power, had helped the rise of the Cholas who, occupying the country roughly covered by the Tanjore and the Trichinopoly districts, made valuable contributions to the development of the "Drāvida style." Under the Cholas, not only the main tower, the **vimána**, attained lofty heights, but there were interesting modifications of the 'makara toraṇa' and of the pillars which became slender and elegant. The

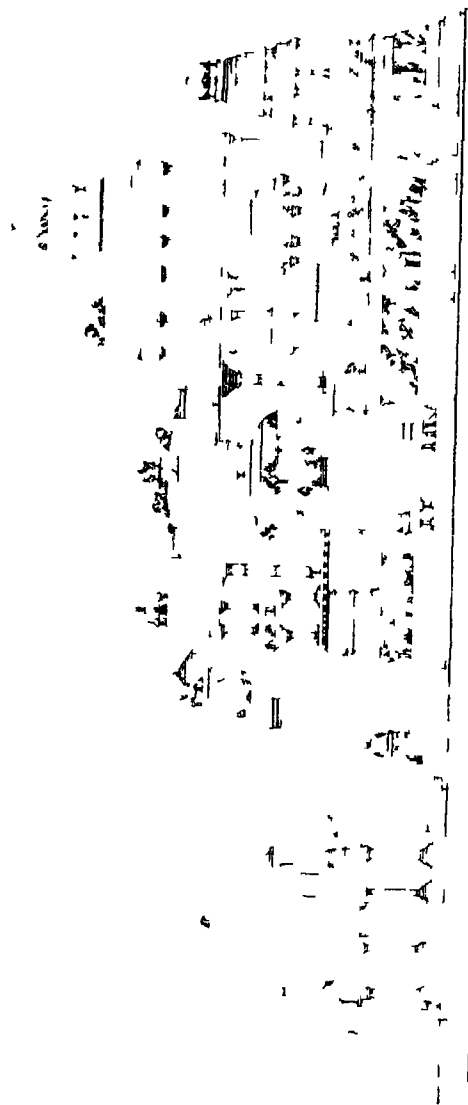



Fig 41 Section of Kailasa Temple at Elura (Burgess)

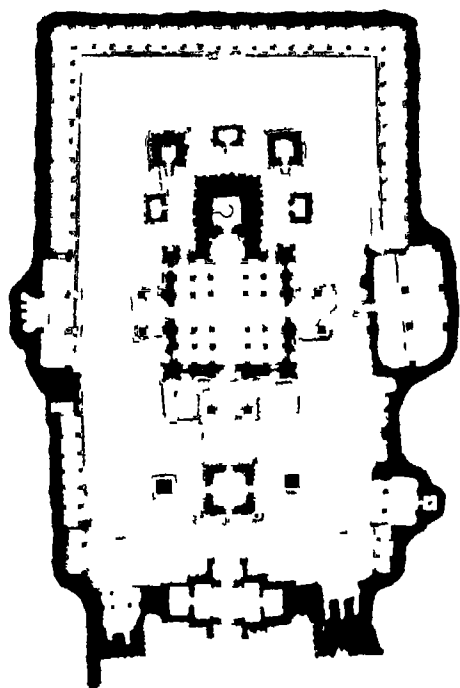



Fig 42. Plan of Kailasa Temple at Elura (Burgess)

arches (toraṇas) over the niches (deva koṣta) are very characteristic features illustrated in the early Chola temples at Srinivasa naḷlur, and also at Cape Comorin. The typical Chola vimāna is best studied in the Śiva temple at Tanjore, dedicated to Brihadīś-wara by Rāja-Rāja I about 1000 A.D. (Plate LXIII) and the temple at Gangaikonda-Cholapuram built by his son Rajendra Chola about 1025 A.D. It is from the time of the Chola builders, that the "gopurams," the large gate-towers, so characteristic a feature of later Dravidian style first make their appearance and which gradually attain rather exaggerated proportions, putting to shade the main tower over the sanctuaries. The Pandyan and the Vijaynagara princes took great pride in building these lofty towers of which the most characteristic are those to be met with at Madura (Plate LXXI). Another new feature of the development of the Drāvida style, during the Chola and Pandyan epoch — is the building of large 'mantapams' or pavilions, supported by elaborately carved pillars — which are designed and carved in intricate forms and patterns and sometimes carved in the forms of cars (rathas). These are best studied in the Nartana-sabhā mantapa (Plate LXV) at Chidambardam and the many pillared-halls at Madura.

As an impressive aggregate of numerous shrines connected by elaborate corridors porches and halls — the Chidambaram temples, which received magnificent donations from the Pandyan princes in the thirteenth century, probably, present, for the first time, a full fledged southern shrine with all its complex features typically developed. The characteristic Pandyan style is best illustrated by the great Śiva temple at Avadaiyar Kovil, 32 miles from Pattukota (Plate LXVII). Built by a minister of a Pandiyan prince about the 13th century, it is remarkable for its elaborately sculptured monolithic pillars. Of the architectural monuments, that can be definitely ascribed to the Pandyas is the famous Śiva temple at Tinnevelly. It is designed on quite a magnificent scale, its principal feature being the long corridors with sculptured pillars. — One of these corridors contain a gallery of portraits of the Pandyan princes (Plate LXVI). The long corridors of this temple appear to forestall the famous corridors of Ramesvaram. From the Pandyan epoch, there is a tendency in Southern Indian architecture to create an impression by sheer magnitude, rather than elegance of design and the progress of architecture is chiefly concened with carving gigantic monolothic pillars.

It is on the revival of Hindu culture under the

patronage of the Vijaynagara dynasty that, Dravidian architecture appears to turn a new leaf. There is an attempt to restore, renovate and to add embellishments to almost all the shrines of southern India. Most of the surviving 'gopurams' of southern Indian temples date from this period and owe their height to the architectural ambition of the princes of Vijayanagara. But the characteristic features of the Vijayanagara epoch — are the use of rows of miniature towers over the mantapams—which lend a singulargrace to the temples (Plate LXX). The shrine of Vithala-Rāja at Vijayanagara (1513-1542) is a typical example. For sheer beauty of chaste but minute ornamentation, the unfinished temple (1507-1531) at Tadputri in the district of Anantapur is unrivalled. The temple inside the old Fort at Vellore is another of the master-pieces ascribed to this epoch. The famous Kalyāna mantapa of this shrine with magnificently carved pillars is deservedly famous, for its chaste and vigorous carvings.

After the fall of the Vijayanagara dynasty the Nayakas, originally the Viceroys of Vijayanagara, made themselves masters of Madura and the neighbouring tracts. They tried to keep up the architectural traditions of their predecessors, and imitated the lavish religous charities of their masters. The

sanctuary of the great temple at Madura is attributed to Visvanāth Nayakka (1559) but very probably he rebuilt or renovated the old structure. The Hall of 1000 pillars built in 1560, is a characteristic example of Nayakka architecture. But the most representative building of the Period is the famous Choultry or travellers' resting place of Tirumala Nayakka (1645), designed on a very ambitious scale, the style is rather florid and merely ostentatious without any elegance or originality, the principal feature being the pillar caryatides in elaborately carved sculptures. To the same style belongs the famous corridors at Rameśvaram built by the Setupati Rajas of Ramnad in the seventeenth century. A special feature of southern Indian architecture throughout its history has been the intimate use and adoption of sculptural forms to architectural purposes. The stories from the **purāṇas** with the figures and images of outstanding dieties are skilfully woven into the pillars in remarkable unity with their architectural designs. The living traditions of the Drāvida school have made many new contributions to the architecture of the twentieth century. That the order was still capable of producing masterpieces, upto a very late time, is best illustrated by the magnificent little temple of Subramaṇya at

Fig 43 Plan of Kesavanatath Temple Somanathapura

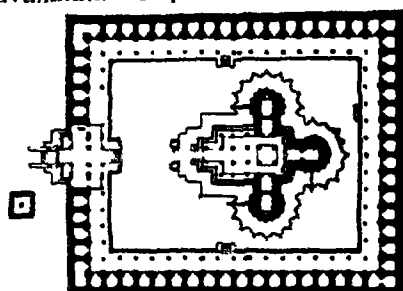



Fig 44
Plan of
Havasalesvara
Temple Halebid

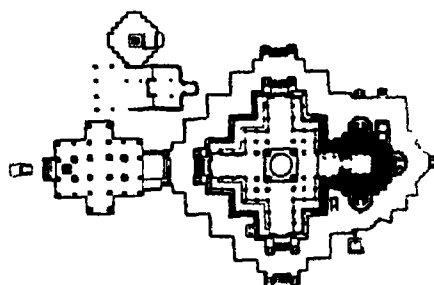
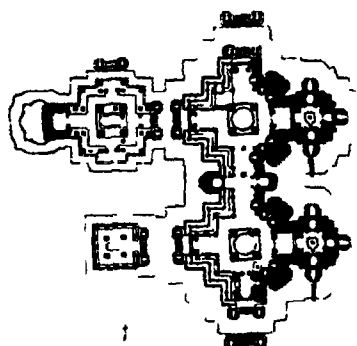



Fig 45 Plan Chenna Kesava Temple Belur

Tanjore (Plate LXIV) dated about the 18th century. For its minute decorative craftsmanship it has justly been compared to the works of goldsmith in stone.

It remains to notice the architecture of the later Chalukyas (10th to 12th century) which is almost contemporary with the Cholas and Pandyans. The style appears to be an admixture of the 'Southern' and the 'Northern' order, with some marked peculiarities It is identified by some scholars, as representing the 'Veśara' class of the Śilpaśāstras The principal features of the style are the relatively low elevation and wide extension, star-shaped plan, and grouping of multiple shrines, and its new forms of pillars (Fig. 43, 44, 45). The tower has a distinctive character, in its pyramidal shape, almost circular in form, and as distinguished from the Dravidian towers, the storeys of the towers are not emphasized. The general effect is that of a ribbed cone, very minutely carved Indeed this inclination to carve and decorate every surface of the temple is sometimes taken to tiresome extremes and injures the effect of the general design and the shilouette The cradle of the style is in the district of Dharwar and representative examples of the earlier phases (10th—11th centuries) occur at or near Ittagi and Godag. These temples have greater affinities to the Dravidian style proper. The

style attains its highest development in Mysore under the Hayasala dynasty, the principal examples being at Somnathpur, Belur and Halabeid. The best illustration of the earlier style (12th century) is the temple of Dodda Basavanna or Basappa at Dombal in the Dharwar district. The star-shaped forms, its cell, and porch are evolved with the help of numerous rectangular points and its Sikhara is quite original in treatment. The later developments, in the examples in Mysore, are principally concerned with the elaborate and minute ornamentation of the surface — than with any original presentation of new forms. The main features are the somewhat excessive decorations on the base (Upapīṭa), excellently carved makara-toraṇa reliefs over arches, and pierced screens of all varieties of geometrical designs. The effect is produced more by the profusion of detail rather than by perfection of outline. The Keśava temple at Somnāthapura (20 miles from Seringapatam) built by the Prime Minister of Narasimha III (1254-1291) is the finest example of the later Chalukyan order, (Plate LXXIV) better described by the term "Hayasala style" from the Hayasala Vallala dynasty reigning in Mysore for three centuries (1000-1300). The Keśava temple is a triple shrine, elegantly grouped round a central hall and

standing on a platform in the centre of a cloistered court. The unity of the plan emphasizes the effect of impressive grandeur. The examples of the style at Halabeid, (Dorasamudram), the later capital of the Hayasalas, Kedārasvara temple (1219) (Plate LXXII) and Hoyasalesvara (1311) are chiefly characterised by a richness of effect and by the profusion of sculptures decorating their surfaces from top to the summit. The Mahomedan conquest in 1311, brought the further development of the style to an abrupt termination.

Such in brief is a bird's eye view of Indian Architecture in its main outlines, its outstanding orders, types, and characteristics. The varying forms and types have been evolved from time to time, sometimes, necessitated under the stress of the medium employed, and sometimes, under the dictates of religious aspirations, rituals, and beliefs. On the whole, the different forms, whatever their origins, have been indiscriminately employed by adherents of different cults and religious beliefs. And though employed by adherents of different creeds, it cannot be definitely asserted that any particular form has derived its origin from any particular religious

sect. Thus, it is a misnomer to designate any type of Indian Architecture as specifically Buddhistic, Jain, or Bramhinical. It is Indian Architecture for the time being in the service of one or other religion prevailing at a particular place or time. Thus the archaic Vedic mounds, dating before the Buddhist periods came to be adopted by the Buddhists for their dagobas, relic-shrines, or stūpas. Similarly the northern Indian nāgara tower-shrines — not only serve as Śiva and Viṣṇu temples, but also as the 'image-house' for many Jaina temples at Khajuraho. The finials of nāgara Śikharas are equally adopted in many Buddhist shrines in Burma. The forms of the Chalukyan or the later Hayaśālā order are indiscriminately used for a Hindu or a Jaina shrine. The barrel shaped Veśara temples of early Buddhistic uses have been adopted in toto for Bramhinical shrines (cp. Plate XXII). In fact, the monolithic temples at Mahāvalipuram are lineal descendants of the earlier Buddhist Vihāras, while the great Mahābodhi temple at Bodh-Gayā, with its conical tower, and its **kalasa** (Plate XXVI(a)) is after all an archaic form of the curvilinear śikhara temple of the north.

One of the peculiar character of Indian Architecture is its innate inclination to transcend its structural

form. An Indian temple, be it Buddhistic, Jaina, or Hindu is a monument par excellence, rather than a mere utilitarian covering, or a shelter from heat and rain. Indian Architecture always attempts to cover the form necessitated by its structural scheme under the cloak of a symbol, — and its decided inclination is to achieve a plastic pattern. Fundamentally an image-house, the Indian Temple aspires to the form of the image itself. This sculpturesque treatment of the structural form is almost a habit with the Indian architect. The Buddhist stūpa is not merely an elaborate casket for a holy relic but easily symbolises the image of a seated Buddha, with his head crowned by a series of concentric **chhattras.** The long perpendicular lines of the Vimāna of the Lingarāja temple ⟨Plate XXXV⟩ with its stately crown of **amalaka** is the true picture of a gigantic Śiva lingam, — not merely a stone covering for it. The typical temple of the Khajuraho group ⟨Plate XLI⟩, with its shoulders spread out, looks like a veritable image of Viṣṇu, carrying an elegant **mukuta.** The stately **gopurams** of the Dravidian temples ⟨Plate LXXI⟩ are pictured, as it were, in the outlines of deified forms. They impress you with the presence of the divinity itself. This sculptural habit finds ample scope in many

details of the southern temples in devising gigantic monolithic pillars and caryatides which literally totter under the weight of the gallery of portraits of gods, kings, men and animals. Every part of the architectural form tends to swell into a figure. Indeed sculpture is regarded as an organic part of architecture and inevitably springs from all kinds of structural forms. Even in the comparatively simpler designs of northern Indian temples — the pillars are figured in the lyrical forms of elaborate vases from which sprout all kinds of ornamental plants in the glory of their tropical luxuriance, which make one forget that a pillar, after all, is a useful though a somewhat prosaic prop for carrying weight. The æsthetic beauty of Indian Architecture derives its quality from the expression of a plastic idea — the result of an image-making, — an idolatrous instinct — rather than that of a purposeful structural design.

The forms of some of the types can be related to the symbolism of Indian metaphysical thought. Thus the theory of rebirths, adopted both by the Bramhinical and Buddhist creeds, according to which the numerous cycles of births and re-births leading to a variety of life-forms, rising higher and higher and growing narrower until matter ⟨ jivatmā ⟩

becomes absorbed and united with the divinity ⟨Bramhātmā⟩ was undoubtedly of the greatest significance in determining that form which occurs in the temples with conical towers which diminish and taper off to a spire. Thus the types of architecture are microcosmic mirrors of the macrocosm and therefore had to be shaped in accordance with the principle of totality which symbolises universality in the world of matter. Indian Architecture is thus a monumental expression of metaphysical symbolism ⟨Diez⟩.

We have hardly space to offer comments on all the outstanding masterpieces which are fully covered by the illustrations, but a few words of tribute may be useful to those who have not yet developed a taste for Indian Architecture.

On the broad shoulders of a little hillock at Sanchi, the Buddhists of old have bequeathed to India its great and marvellously carved Stone-henge which Druids could never dream of,—and whose majestic solemnity is guarded by stately **toraṇas** which spread their cyclopean wings—to overawe the vulgar and the philistine into silent reverence ⟨Plate II⟩. And when the stūpa is transferred into long and deep recesses of gigantic rocks, the Buddhist cave-temples, as at Kārli and Bhājā, resound with the music of the

triśaraṇa* under the mystic shadows of the ribbed dome — the sloping lines of which descend to be petrified in the emphatic forms of the prismatic pillars which carry, on their lotus cushions, capitals of human and animal motifs the meaning of which baffles scholars and antiquarians ‹ Plate XV ›.

And when the Chaitya shrine expands to the spacious and magnificently frescoed Vihāras at Ajanta, the dim religious lights of the Cave temples sparkle on the expansive walls, exquisitely frescoed, between the interstices of the gigantic pillars, to induce a deep and spiritual contemplation.

When the Imperial Guptas raise a tiny flat-roofed Hindu temple, to mock the great stupa at Sanchi, its crude, clumsy and dwarf pillars, still carrying the aroma of the hoary archaism of the caves, spell out in no uncertain terms, in its strongly marked horizontal constuction, a strength and a repose which easily recall, if it cannot rival, the temple of Neptune at Paestum ‹ Plate XXIV ›.

When the martial Pallava princes seek to celebrate their victories on the field of battle by erecting new temples on the shores of the sea, the old Vihāras

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* Buddha, Dharmma, and Sangha ‹ community ›, the ' three refuges ' of Buddhism are embodied in a formula often repeated by pilgrims — " Buddham saranam gacchāmi, Dharmam saranam gacchāmi, sangham saranam gacchāmi "

rear up their heads in novel but tiny monoliths on the now forgotten sands of the sea-shore at Mahāvalipuram. As new but mysterious shrines of Śiva, the tiny **rathas** of the Pallavas, spell out a monumental quality in their solitary grandeur ⟨Plate LIV to LVII⟩.

And when the Dravidian Sthapati ⟨architect⟩ sends a message to the Rāṣtrakūta prince at Elura ⟨Plate LXII⟩, the monolithic Kailāsa is violently twirled and shot out of the living rock to echo the peak of the Himalayas in miniature magnificence.

The Early Chalukyan Princes of Badami ⟨Vātāpipura⟩ conquer Kānchi to be conquered in their turn by its artistic monuments which they seek to transplant, and, in the attempt, the Pallava temple achieves a rich expansiveness in a new environment. ⟨Plate LXI⟩.

The Gānga and and the Keśarī kings of Kalinga offer their tribute to their **iṣta-devatá**—⟨the gods after their own hearts⟩, and their pious offerings incarnate in a new form in the stately śikhara temples of Bhuvanesvara, Puri and Konarak—whose spires rival the Gothic cathedrals, as they spring from grave and meditative **amalakas** to reach the heavens ⟨Plate XXXIV, XXXV⟩.

The same types are borrowed and richly developed, by the devout princes of Bundlekhand, for, the

temples of Khajuraho, do indeed, improve and perfect the earlier pattern by many novel features, mainly by a skilful emphasis on verticals, which give an illusion of greater height (Plate XLI).

When the devotees of Jina seek to worship their Tirthamkaras in the deserts of Rajputana, their prayers crystallize in the wonderful temples of Mount Abu, which in æsthetic exuberance eclipse all the other monuments of India. The whiteness of the marble symbolises the passionless purity of their ascetic faith, — as the astounding profuseness of the marvellous traceries of the fairy ceilings reflect the eloquence of their devout munificence as they put to shade the pendents of the Westminister Abbey (Plate XLVI).

The shrines of the South, built piece-meal, without any generous or comprehensive plan, by the successive tributes of Chola, Pāndya, and Nayakka princes (unlike the temples of the North, mostly built straight off under the impulse of a single epoch), and generally lacking in an unity of design, make up, in their magnificence and stupendous scale, for their proverty of elegance and dignity. The silhouettes of their 'vimānas' and 'gopurams,' as the mystic grandeur of their never-ending corridors and pillared **mantapams,** overawe one by a crude

impressiveness rare in the temples of the North. The richly carved mantapams (Plate LXIX) with their monolithic pillars and the facades of the temples broken into exquisitely carved arches invest Indian Architecture with a new plastic quality, and entwine architecture and sculpture into one indissoluble unity. The gift of India is indeed a rich and a valuable one to the Architecture of the World.

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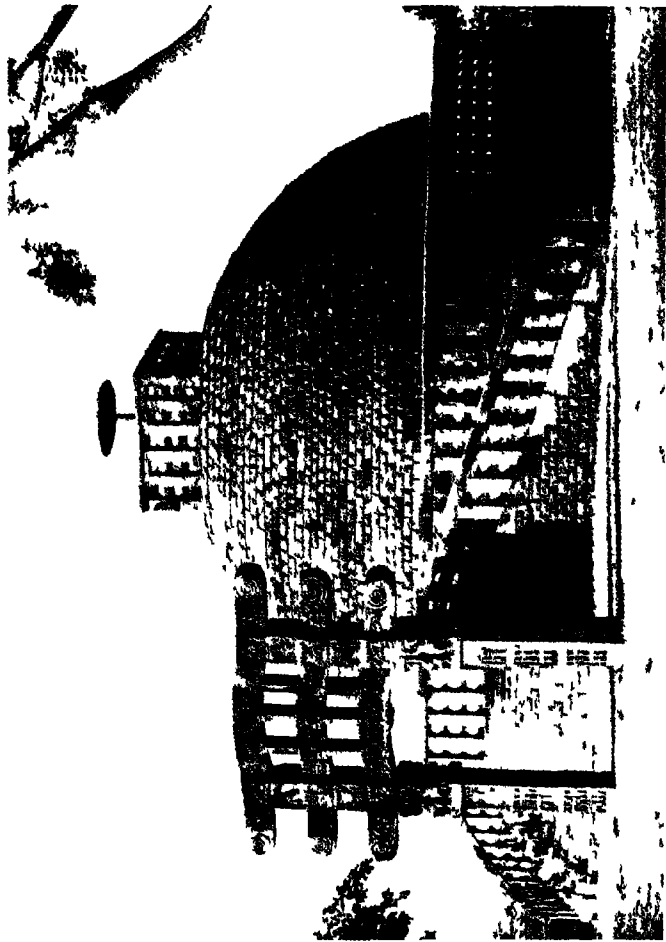
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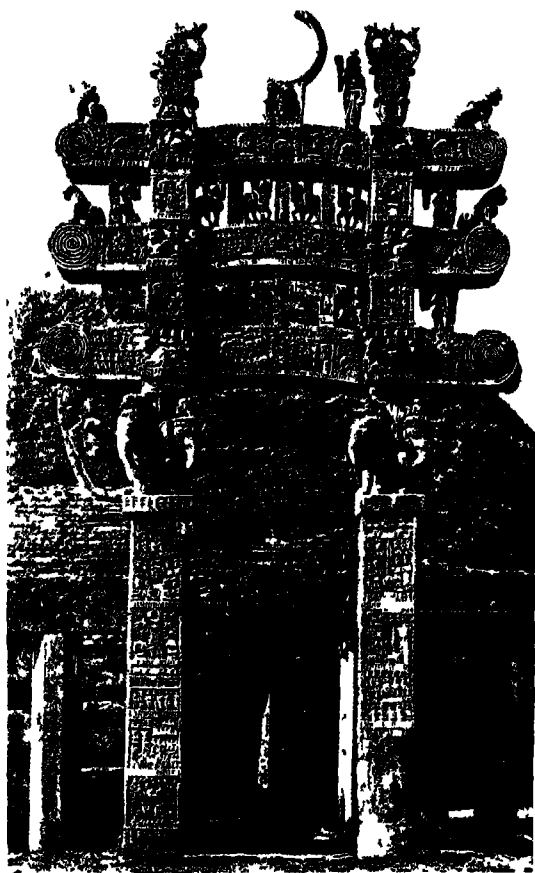
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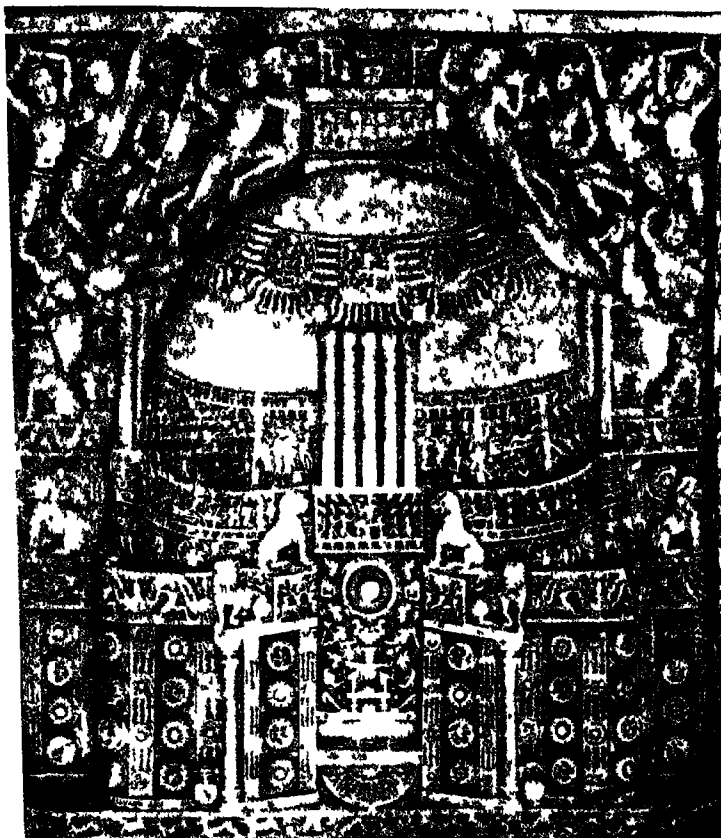
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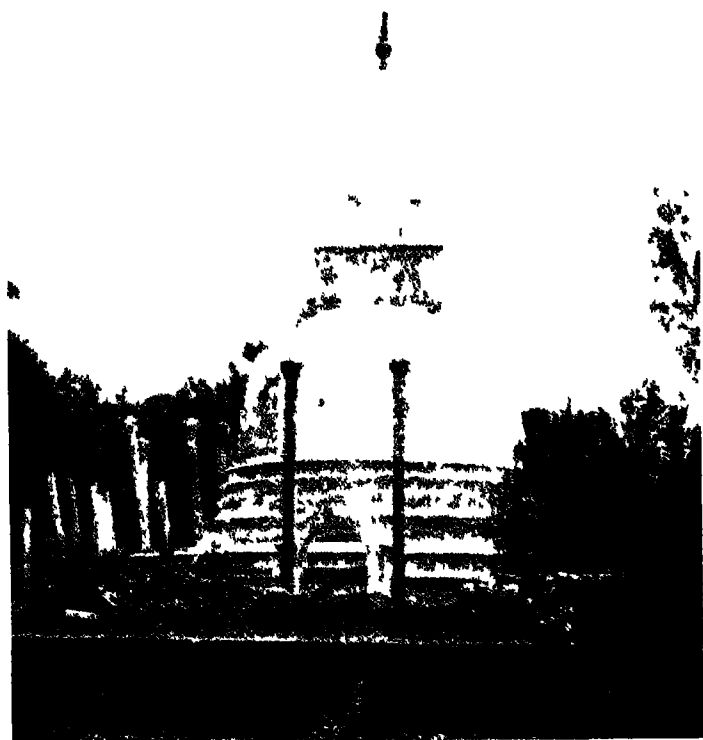
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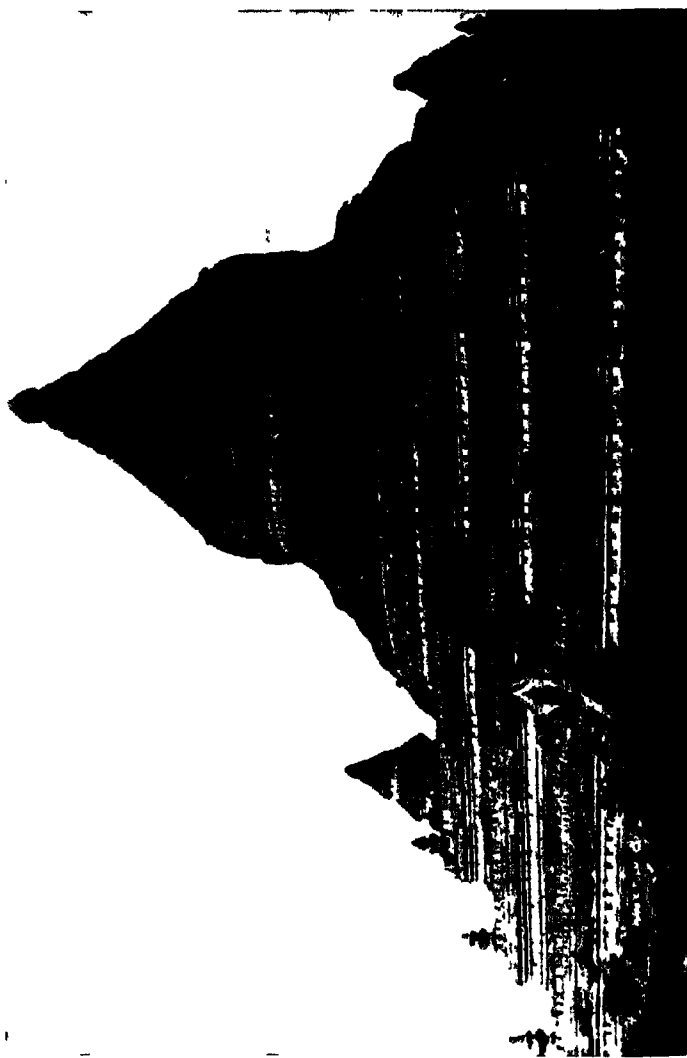
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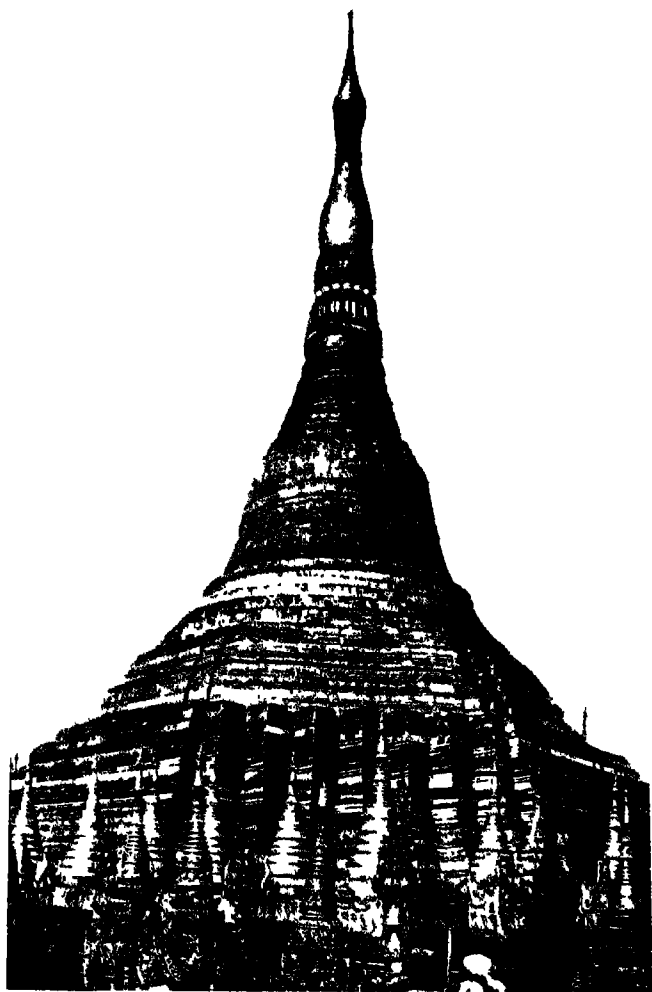
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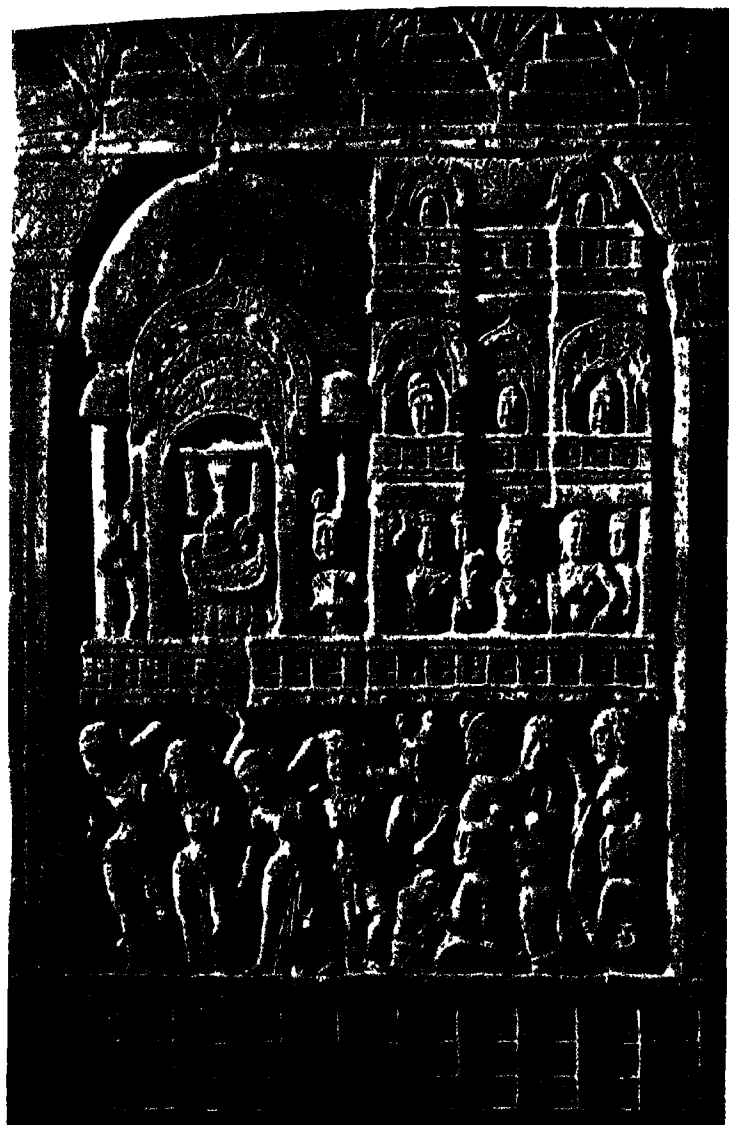
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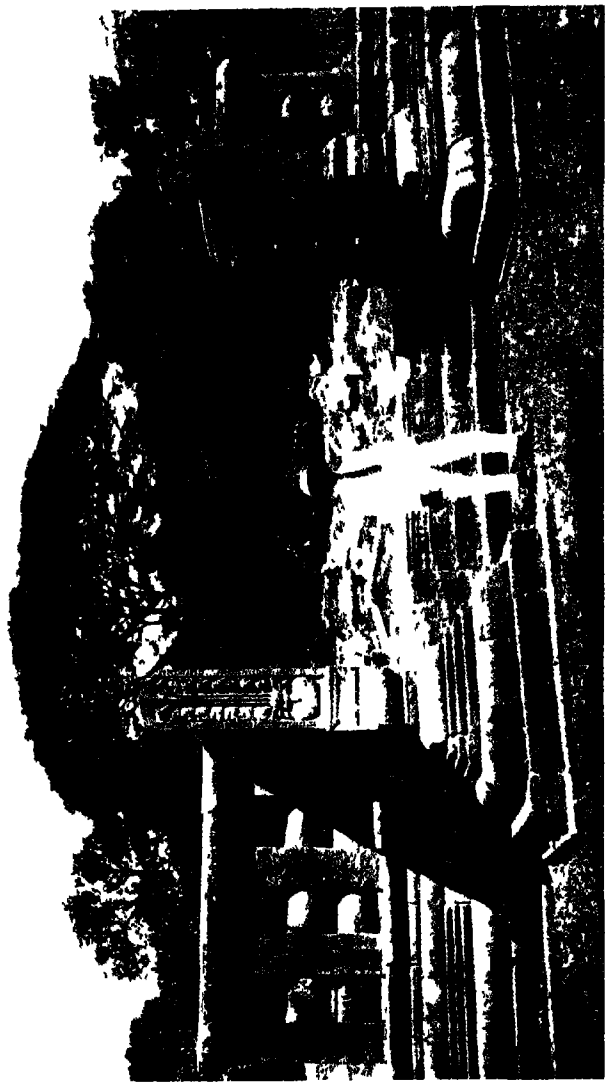
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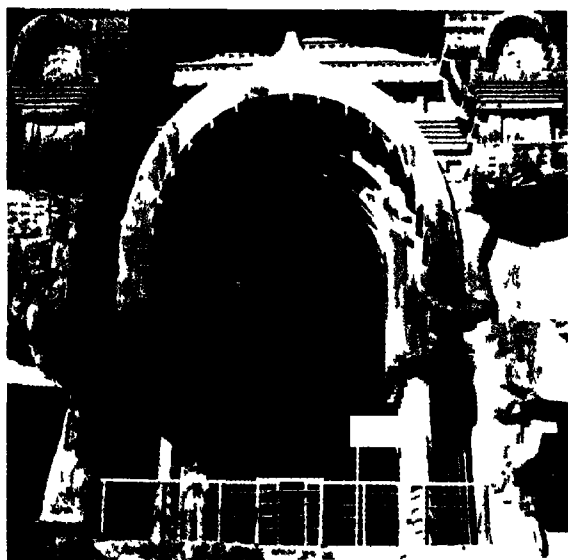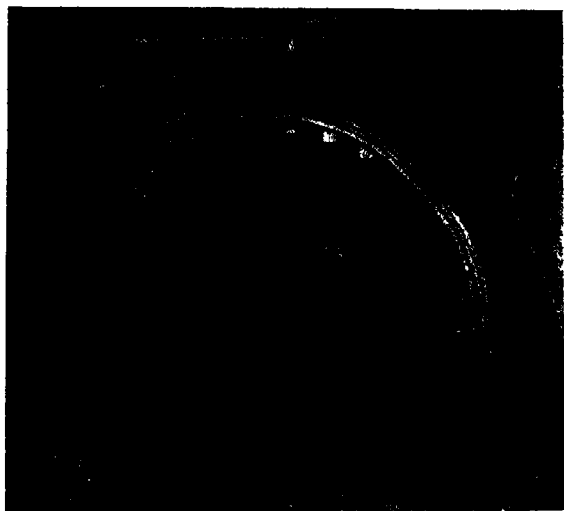
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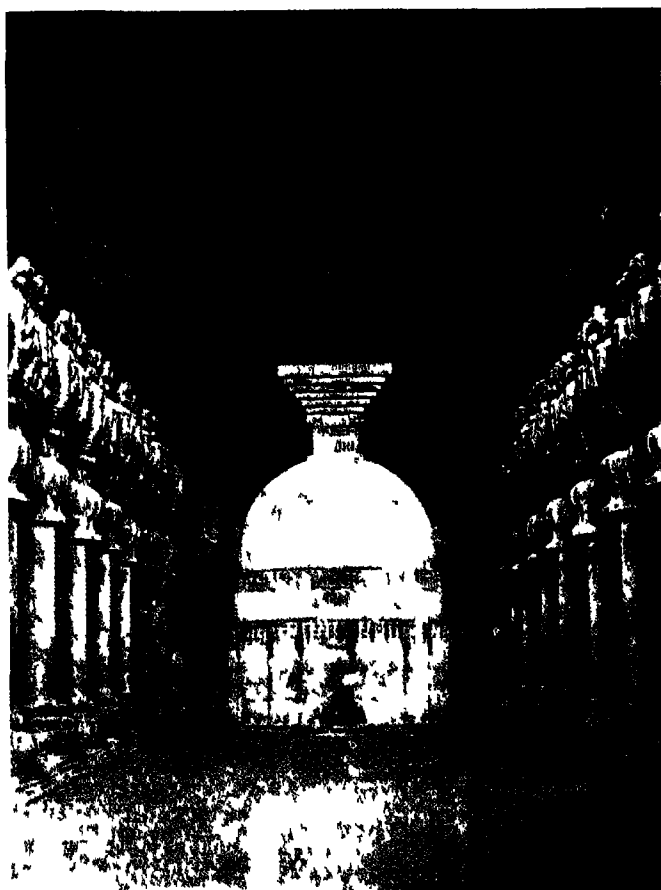
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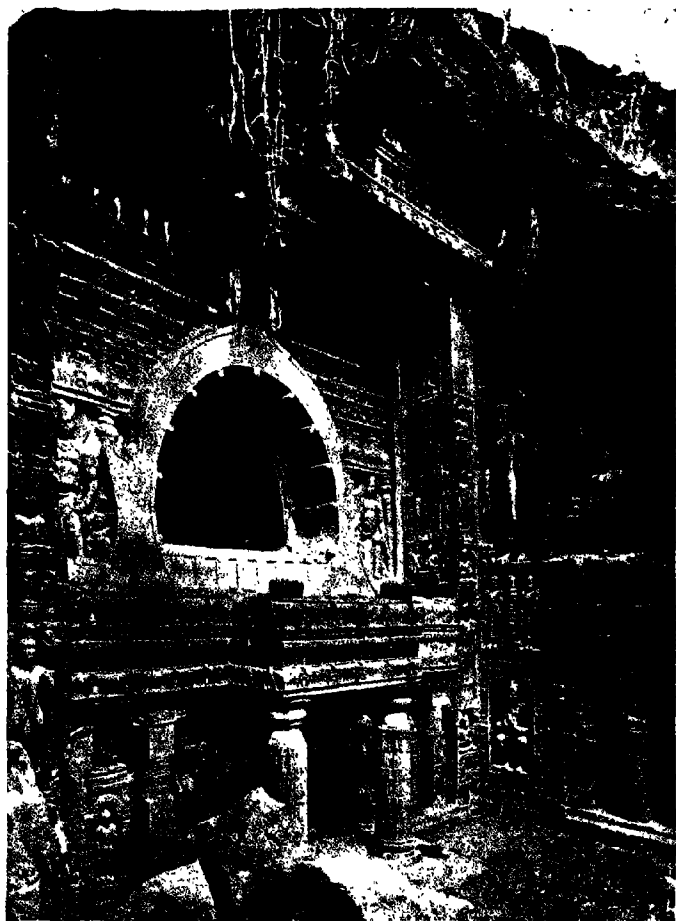
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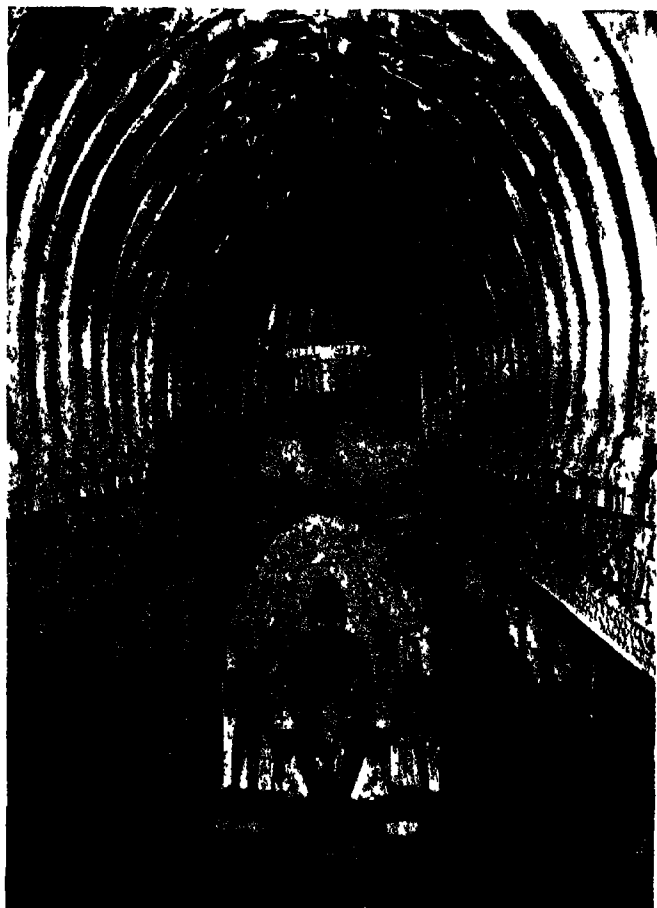
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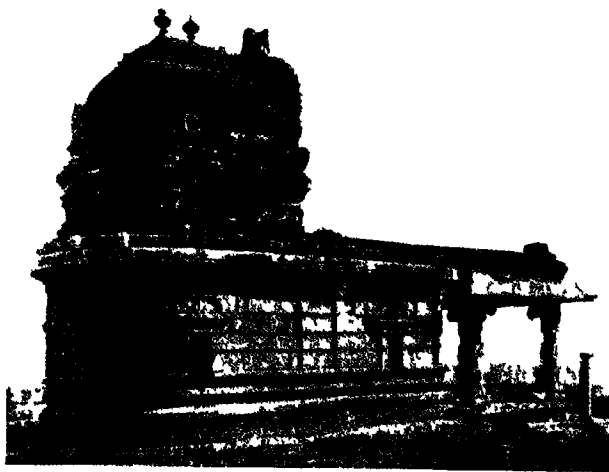
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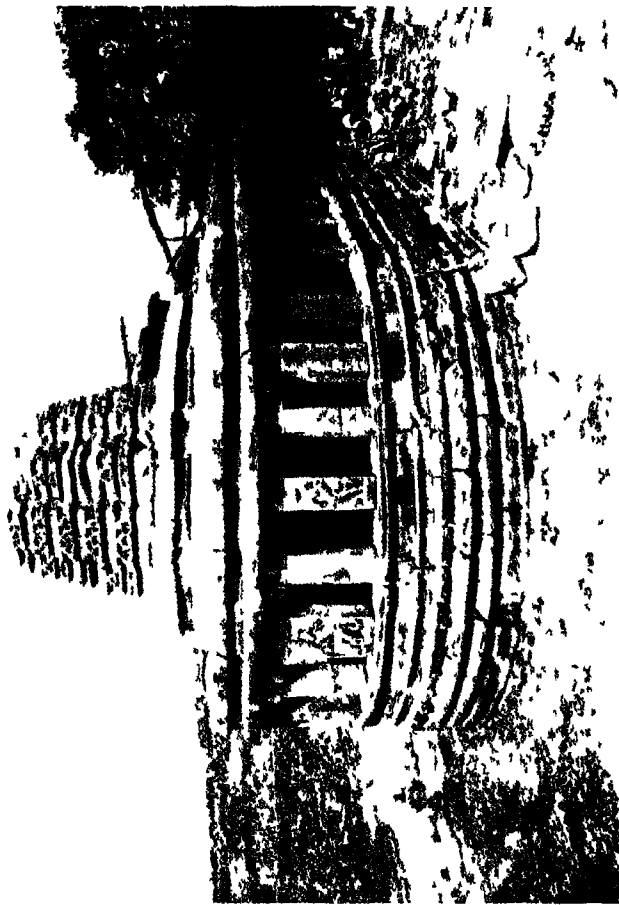
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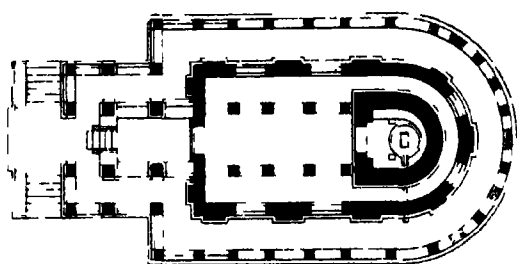
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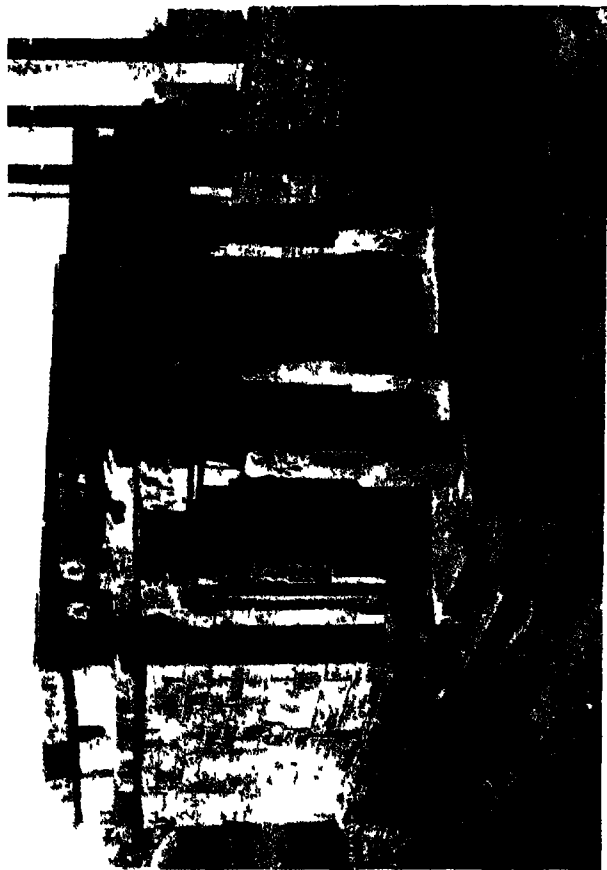
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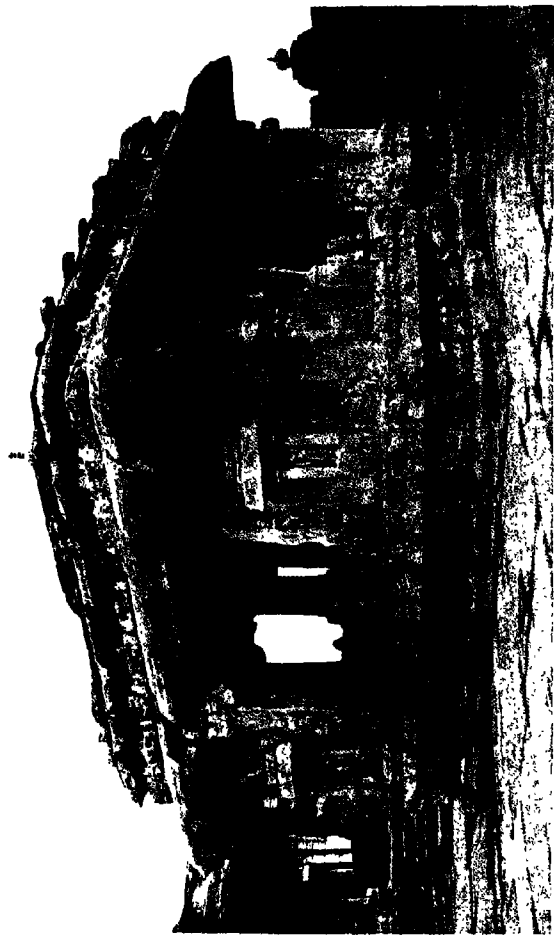
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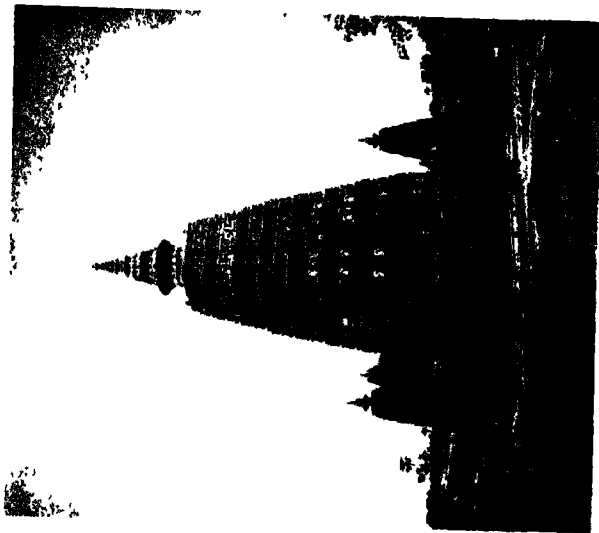
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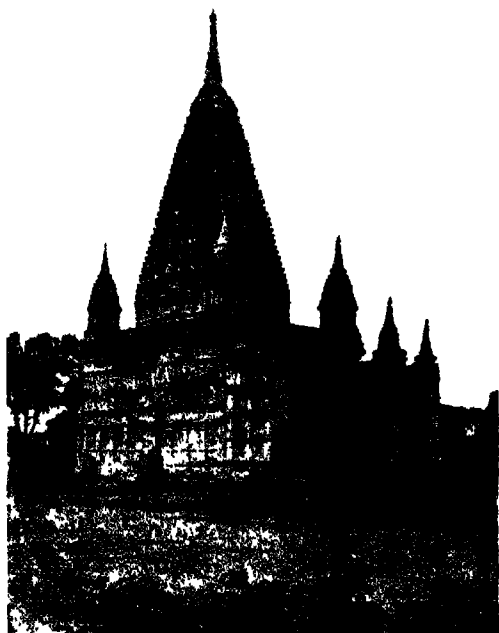
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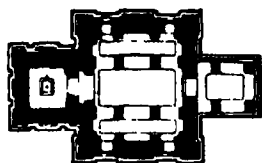
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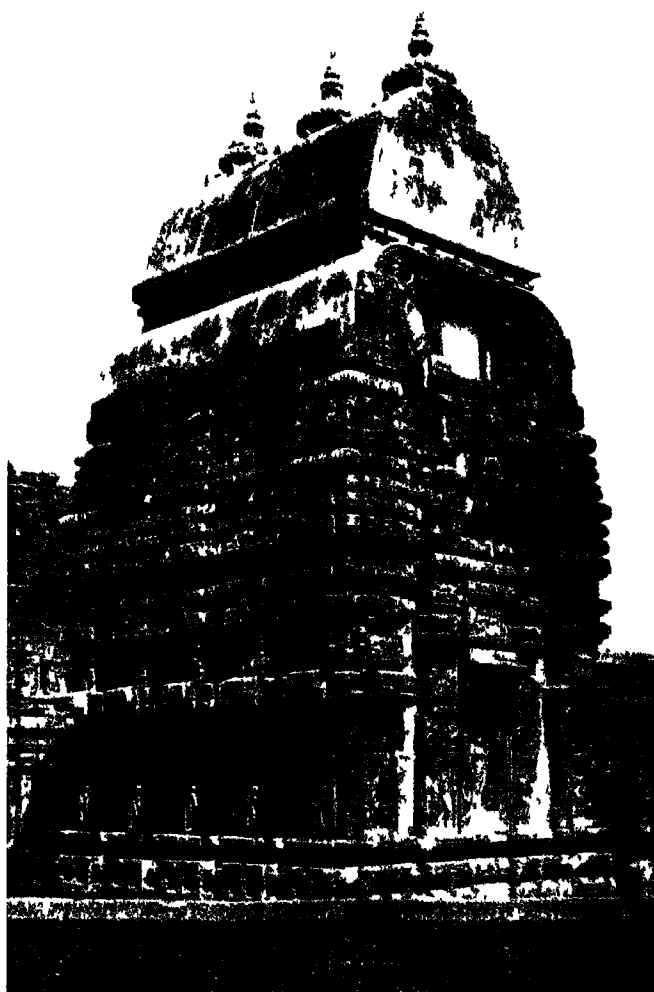
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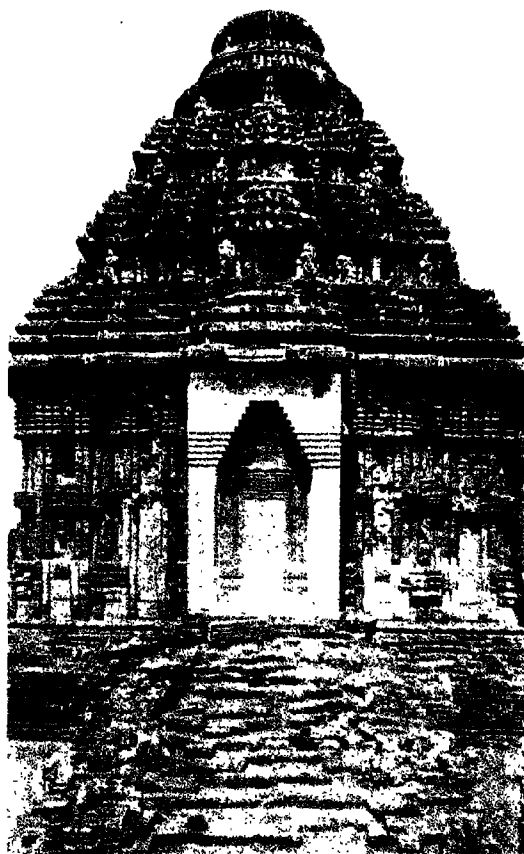
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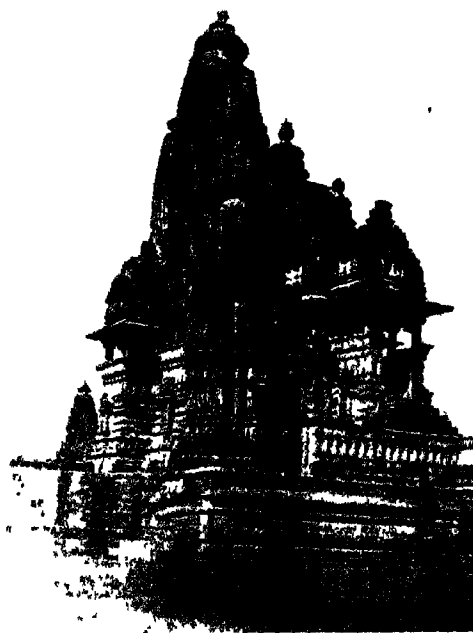
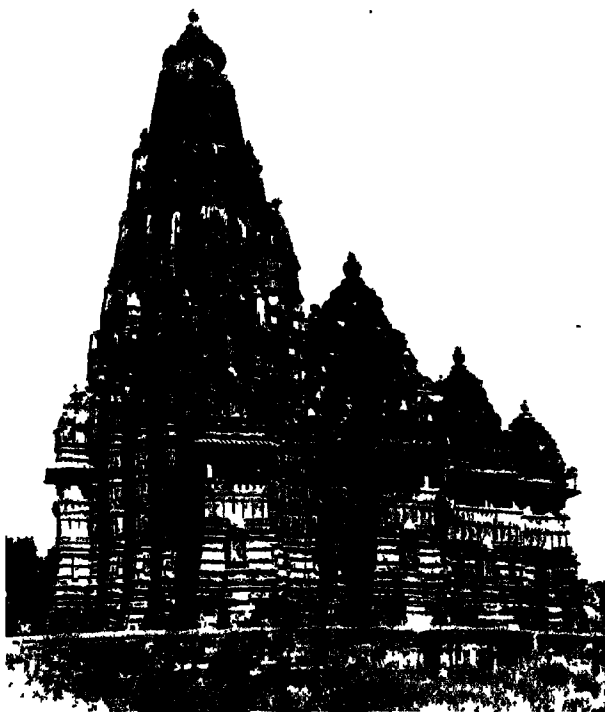
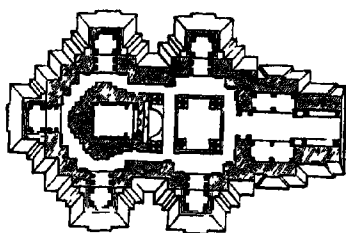
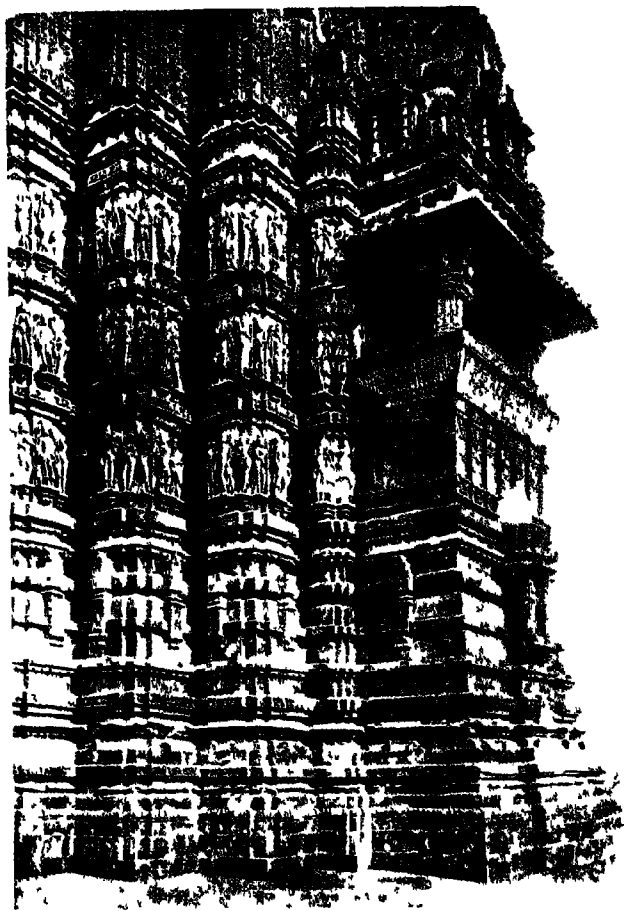
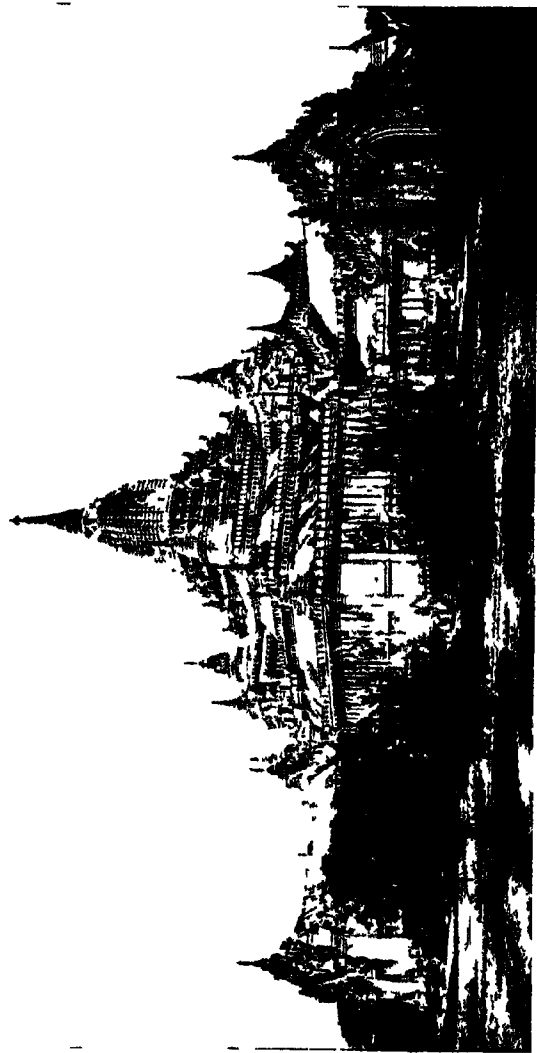
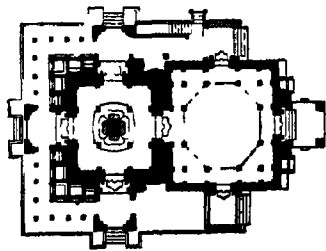
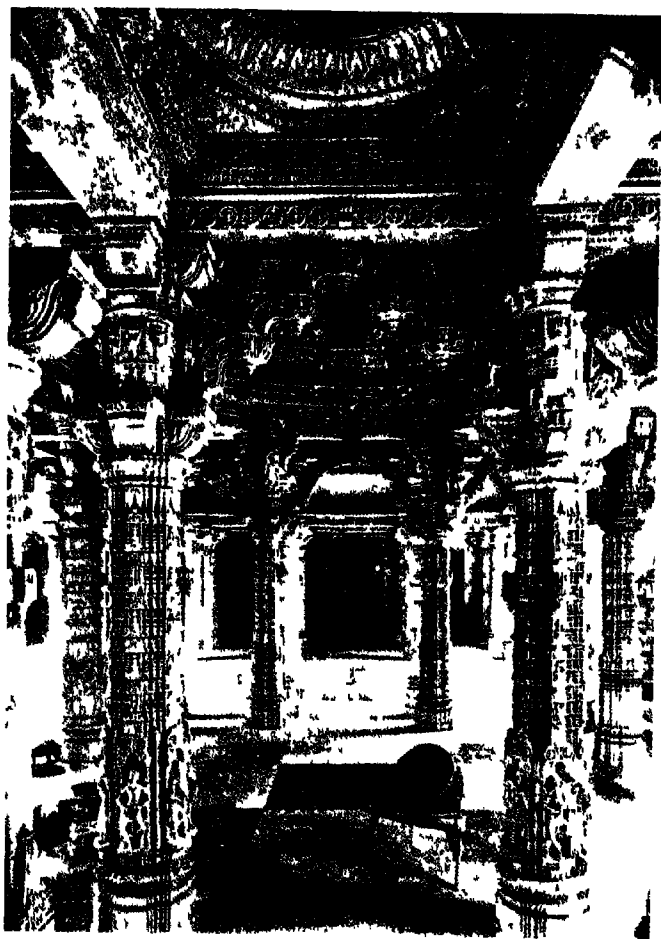
XXXVIII*(a)* Temple of Sun, Osia, Jodhpur,
late 9th Century A D

XXXIX Chatrapatia Temple Khajuraho,
Circa 1000 A D

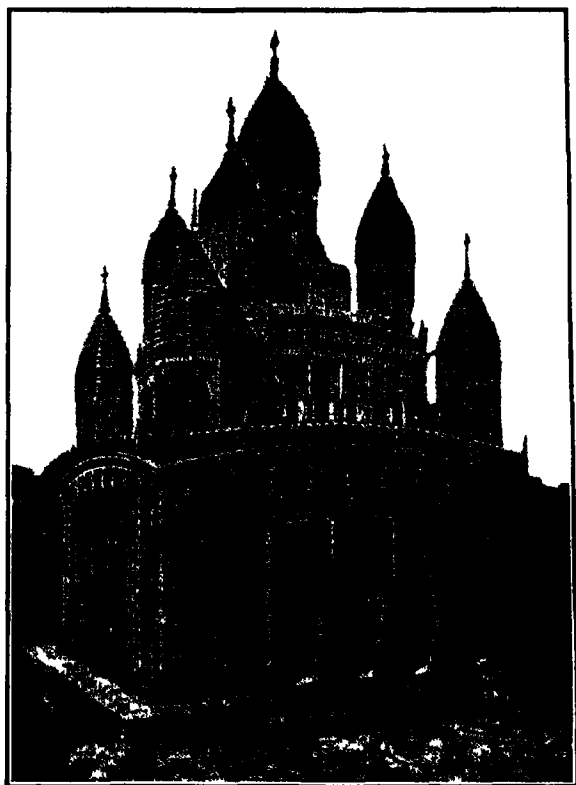
XL Kandarya Mahadeo Temple, Khajuraho, Circa 1000 A D.

XLI Kandariya Mahadeo Temple, Khajuraho
Circa 1000 A.D.

XLII Detail from Kandarya Mahadeo Temple Khajuraho

XLIII Ananda Temple Pagan 1082–1090 A D

XLIV Chaumukha Temple, Mt Abu, 13th–14th Century

XLV Interior, Tejpal Temple, Mt Abu, Circa 1232 A D.

XLVI Ceiling of Tejpal Temple Mt Abu

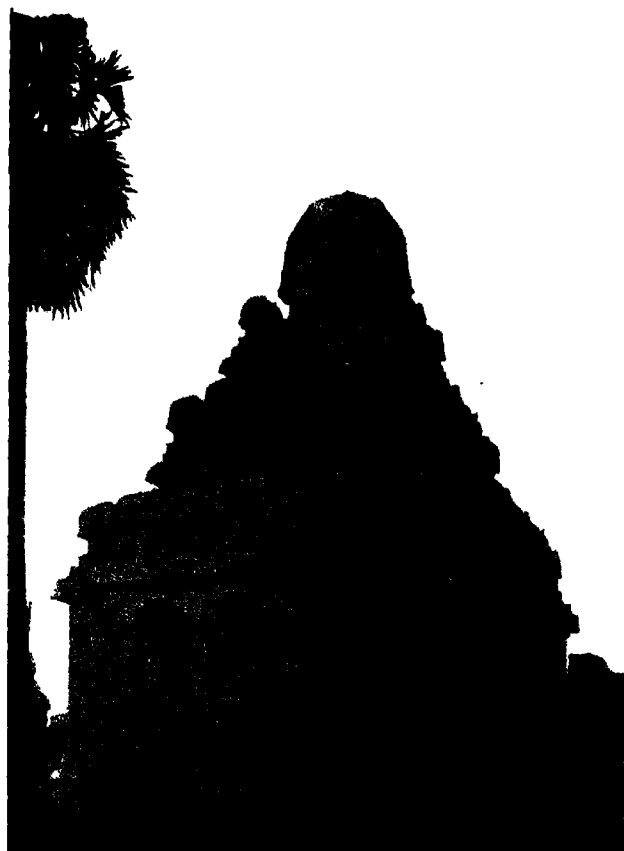
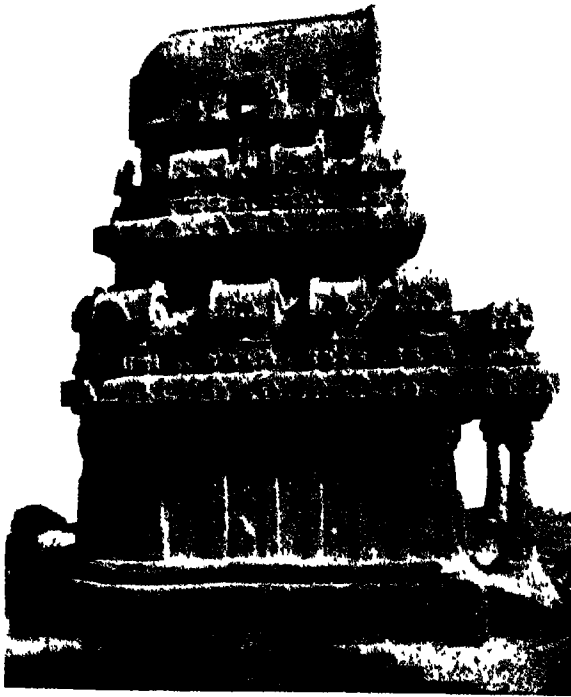
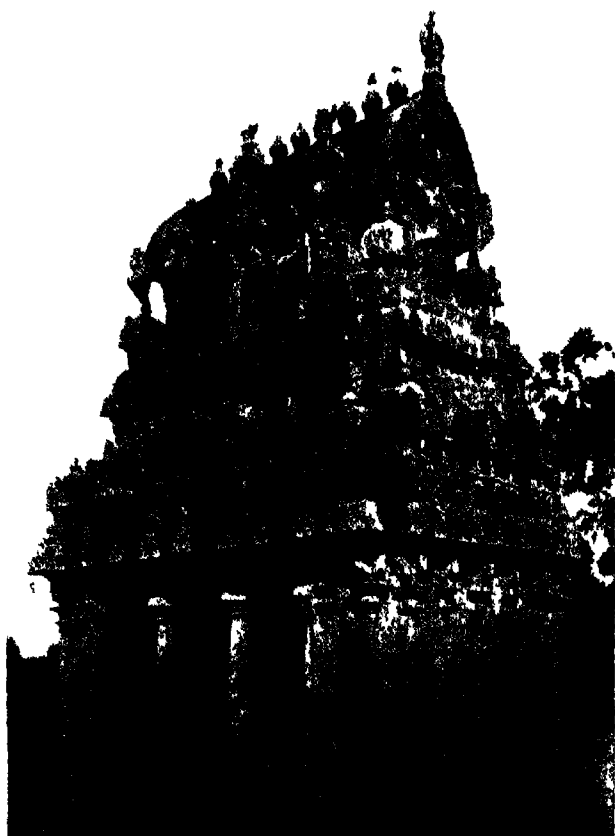
XLVII Sun Temple Mudhera Gujerat 11th Century A D

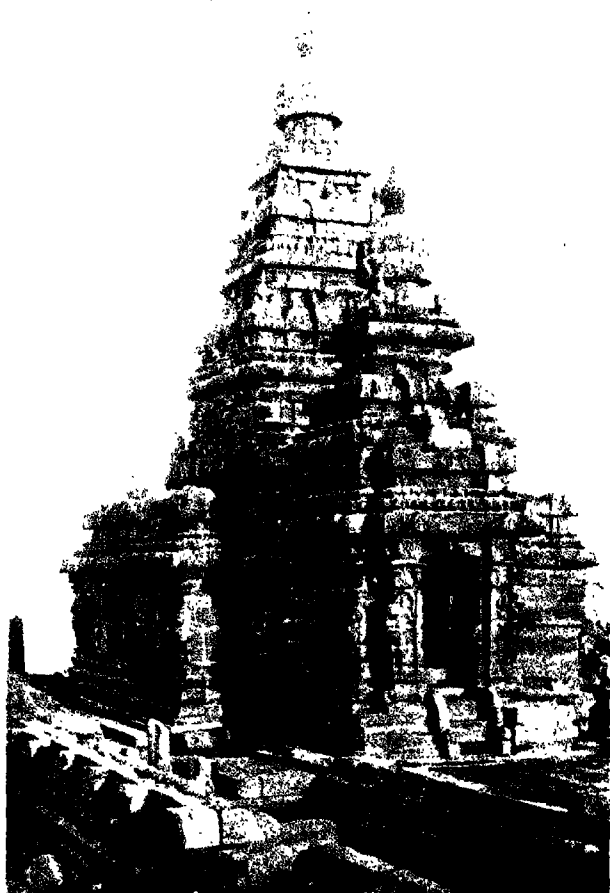
XLVIII Temple of Visvesvara Benares Early 18th Century

XLIX Radhakrishna Temple Nepal, Circa 18th Century

L Kantanagar Temple, Dinajpur, Bengal, (1704-1722 A D)

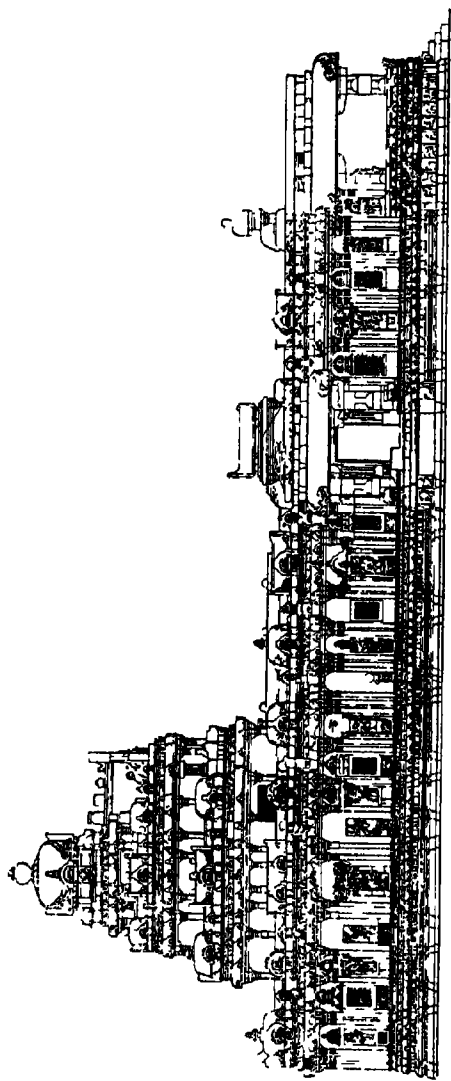
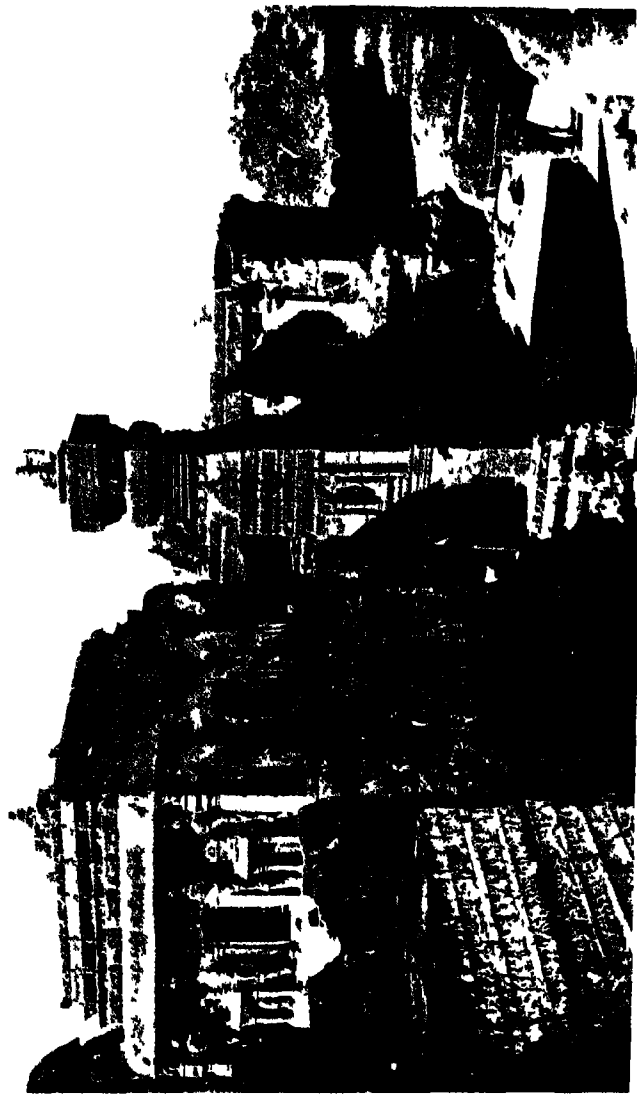
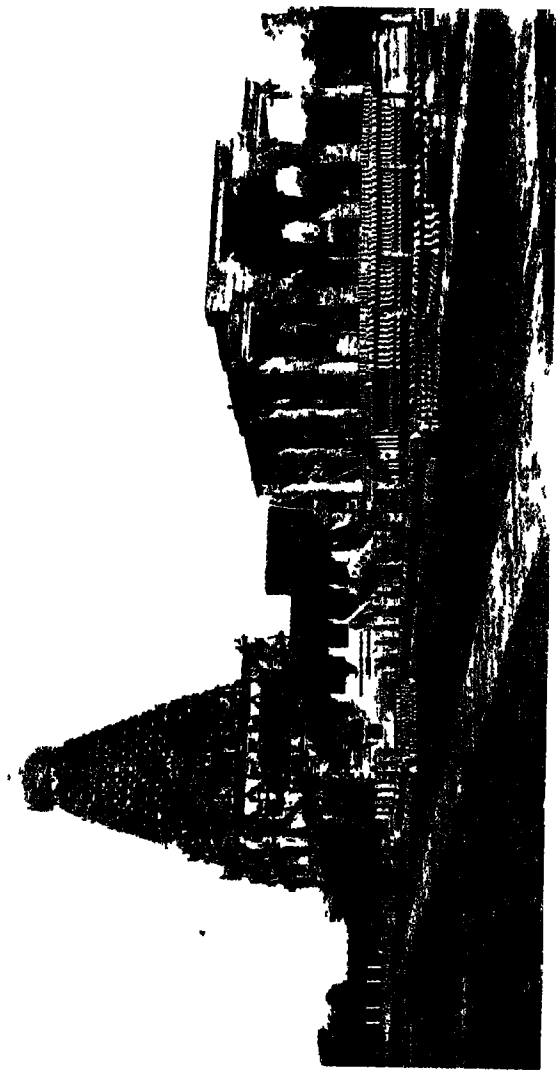
LI Chore Bangla Temple, Bad Nagar, Murshidabad 1755 A D

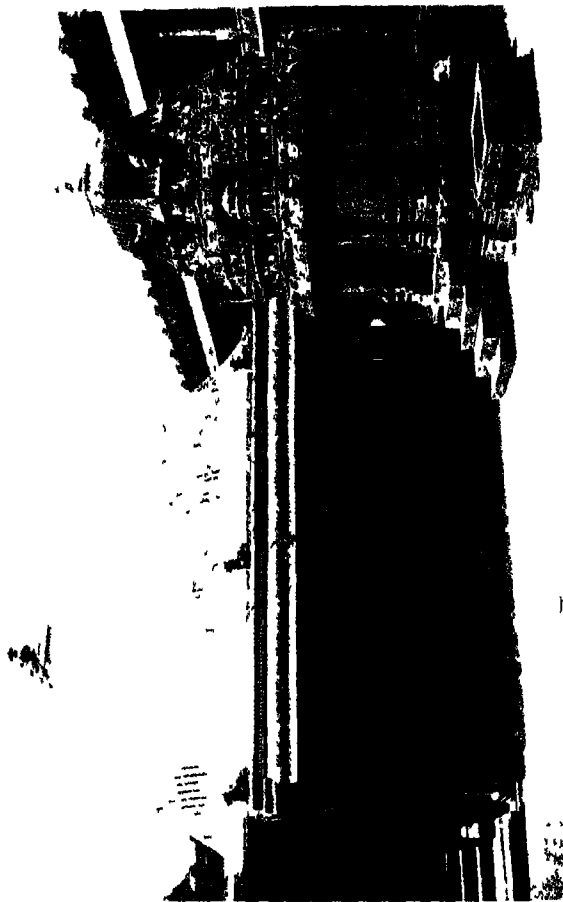
LII Temple of Rani Bhavani, Murshidabad

I III Devi Bhavani Temple Bhatgaon
Nepal, Dated 1703 A D

LIV Dharma Raia Ratha Seven Pagodas, Mahavalipuram, Cira 625-645, Style of Narasimhavarman'

LV Sahadeva's Ratha, Seven Pagodas, Mahavalipuram,
Circa 625–650

LVI Ganesha's Ratha, Seven Pagodas, Mahavalipuram,
Circa 625—650

I VII Draupadi's Ratha Seven Pagodas Mahavalipuram

LVIII Shore Temple, Seven Pagodas, Mahavalipuram, 700-720 A.D., 'Style of Rajasimha'

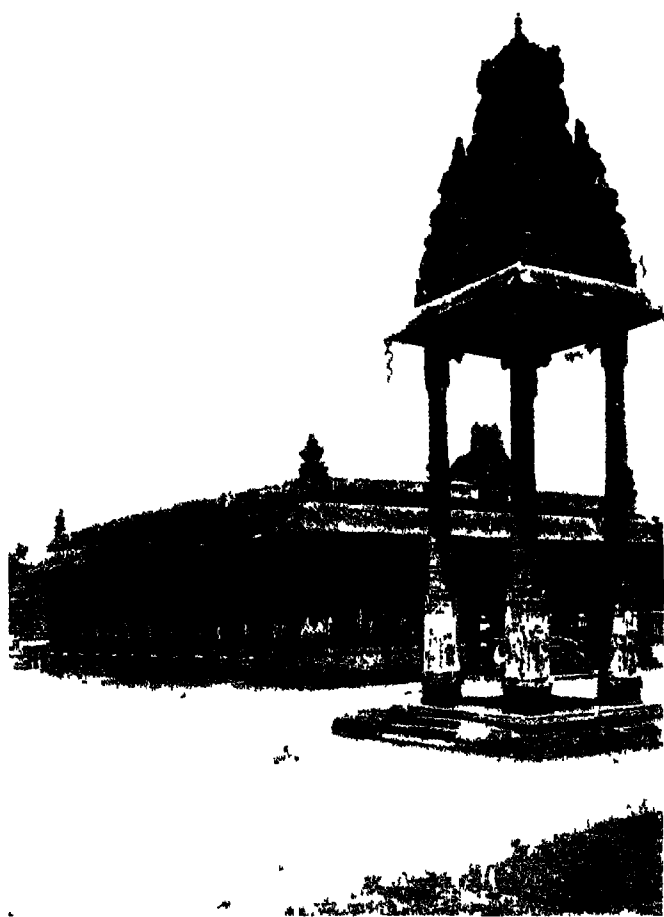
LIX Somesvara Temple, Pattadakal, 8th Century ?

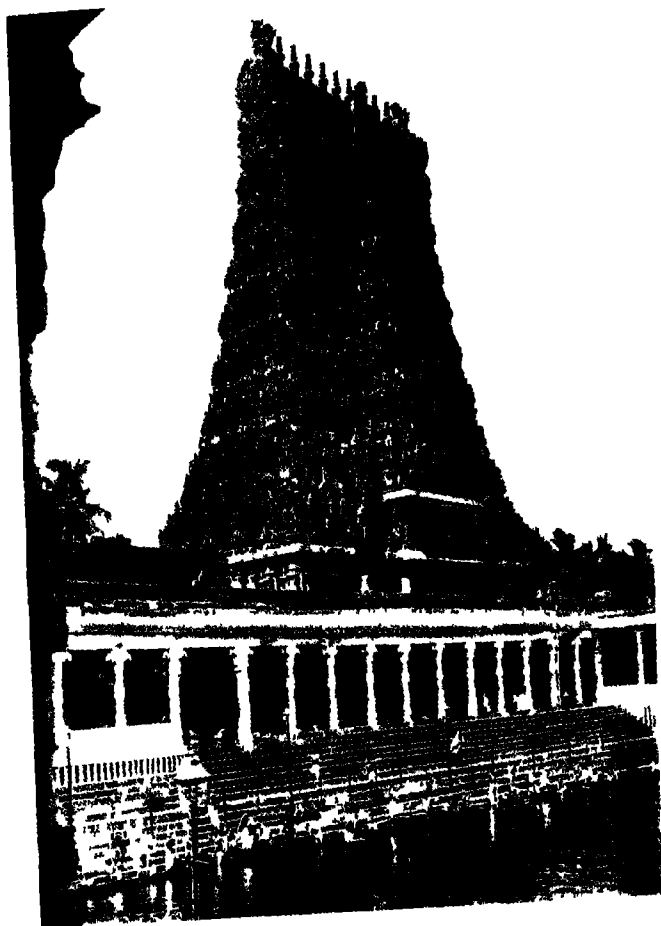
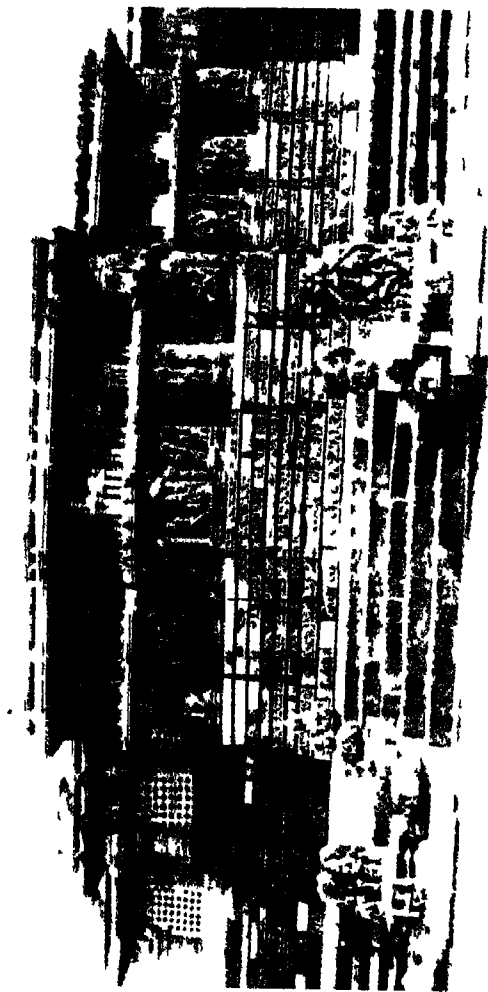
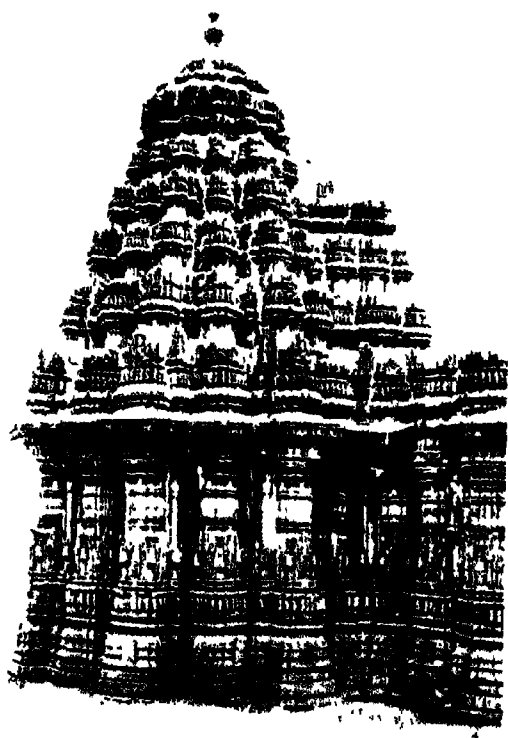
LX Kailasanatha Temple, Kanchipuram, Early 8th Century

LXI Virupaksha Temple, Pattadakal, (Elevation), 740 A.D.

LXII Kailasa Temple Elura 757–783 A D

LXIII Brihadisvara Temple Tanjore 1000 A D

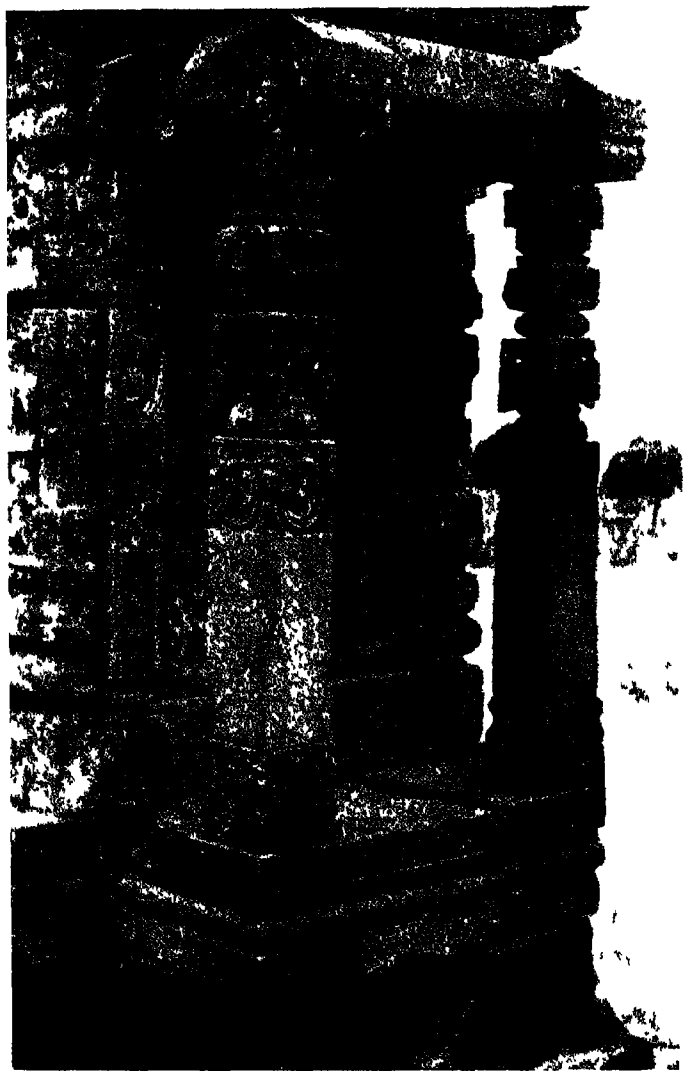
LXIV Temple of Subramanya Tanjore 18th Century

LXV Temple of Chidamvaram, 13th Century

LXVI Corridor, Shiva Temple, Tinnevelley 13th Century

LXVII Mandapa, Avadaiyar Kovil 14th Century

LXVIII "Ratha" Temple, "Stone Car," Tiruvatur, Nagapatam, Circa 14th Century

LXIX Mandapam Vishnu Kanchi Kanchipuram, 15th Century

LXX Vitthalasvami Temple, Vijayanagara, 16th Century

LXXI Gopuram, Minakshi Temple Madura 17th Century

LXXII Kedaresvara Temple Halabeid Mysore 1220 A D

LXXIII Isvara Temple, Arsikere Mysore,
Circa 1220 A.D.

LXXIV Temple at Somanathapura, Mysore 1270 A D

LXXV Pillar, Old Temple, Rajputana 14th Century